



88072327

Annual Report

Bureau of Land Management
California



Fiscal Year 1985

HD
243
.C2
A66
1985

Cover – King Range Black Sand Beach

*Back – Geothermal towers at the
Geysers*



STATE DIRECTOR'S MESSAGE

Dear Public Land User:

As a shareholder in the largest land management operation in the United States, you have a right to know how your lands were managed and what the agency responsible for administering your lands accomplished in the past year.

For the California Bureau of Land Management (BLM), 1985 was a year of progress. As the agency responsible for managing more than 17.1 million acres of public lands in California and about 1.5 million acres in Nevada, in addition to 47 million subsurface mineral acres in California, our responsibilities are broad and varied. As State Director, I am proud of this year's accomplishments by BLM's professional staffs throughout the State.

As proud as I am of 1985's accomplishments, I believe that our success depends largely upon the cooperation of thousands of people who also care about the public lands, including Congressional representatives, other Federal agency personnel, State government officials, State legislators, county supervisors and staffs, and the many groups and individuals who use and enjoy the public lands. In addition, we are also fortunate to receive contributions in time and talent from hundreds of volunteers who take their part ownership in these lands very seriously.

To all these co-stewards of the public lands, we give our thanks for 1985 and we hope for continued cooperation on behalf of these critical resources in the years to come.

We strongly believe that these lands deserve the best care and attention possible. In addition to their natural values, they also generate income, products, and enjoyment for Californians and the rest of the American people. Managed wisely, they offer a tremendous legacy for our children and future generations. We know you share that strong commitment and we look forward to working with you for the future of the public lands.

Sincerely,

Ed Hastey

Ed Hastey
California State Director
Bureau of Land Management





Mining claim location marker

Wild burros at adoption

Geothermal plant

Uncovering a fossil near Hollister

*Endangered plant at Ash Valley
near Susanville*

PUBLIC LAND RESOURCES IN CALIFORNIA

The public lands in California are characteristic of the diversity that makes the Golden State unique. From the arid Southern California Desert, north to the Sierra Nevada Mountains, and west to the rugged North Coast, the public lands and resources administered by the BLM are some of the richest and most beautiful in the State.

These resources include the energy, mineral, and forestry production vital to our continued economic growth, the recreation and wilderness values important for our enjoyment, and the preservation of our natural and cultural heritage for future generations.

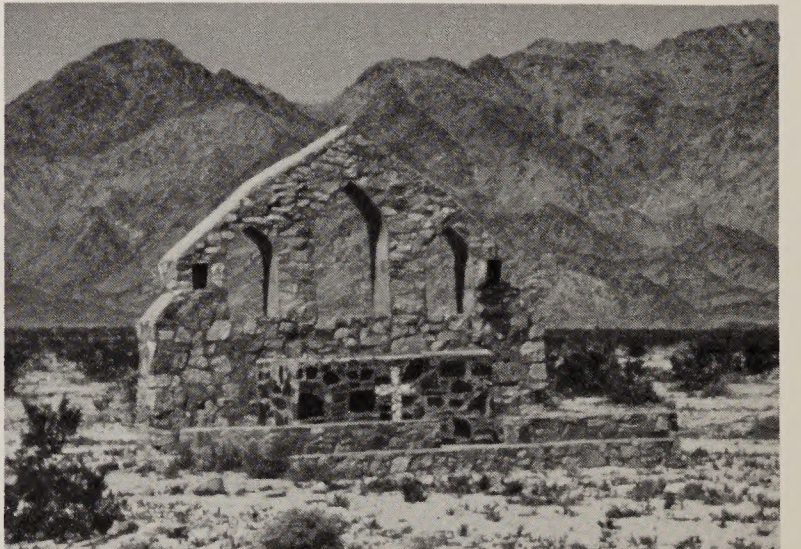
BLM is responsible for achieving a delicate balance among these often competing uses, following the principles of multiple use and sustained yield set down by Congress in the landmark 1976 Federal Land Policy and Management Act.

The importance and diversity of these lands are illustrated by these facts:

- These lands produce about 25 million barrels of oil annually.
- Off-highway vehicle enthusiasts, campers, hikers, and other recreationists make more than 28 million visits annually.
- More than 1.6 million acres are known to possess the potential for generating geothermal energy from deep inside the earth's core.
- About 125,000 head of domestic livestock graze on the public lands.
- Some 35 archeological and historical sites are significant enough to be on the National Register of Historic Places and 650 more sites are eligible for inclusion.
- About 10 trillion cubic feet of natural gas are produced from these lands annually.
- Some 92 areas, totaling 750,000 acres, are given special management attention as Areas of Critical Environmental Concern.
- More than 20 million board feet of timber are available for sale from these lands each year.
- These lands generate almost \$90 million in revenues; the State of California receives almost half that total.
- In addition, counties receive about \$10 million annually in direct payments in lieu of property taxes.
- There are more than 170,000 mining claims for gold, silver, and other minerals on these lands.
- Almost 7 million acres are under study for their wilderness potential.
- About 2,600 wild horses and 2,800 wild burros roam these lands.
- One of the Nation's two National Scenic Areas, the East Mojave, is on public lands in Southern California.
- These lands are home to more than 800 species of wildlife, including 18 threatened or endangered species.
- Two national conservation areas designated by Congress, the King Range on the northern California Coast, and the California Desert, are high priority management areas.
- One of two internationally designated Man in the Biosphere Reserves in the United States is found on BLM lands in the North Coast Range Preserve.
- These lands provide important rights-of-way for powerlines, pipelines, communication sites, and other critical public projects.

Table of Contents

State Director's Comments	i
Public Land Resources in California	iii
Table of Contents	v
1985 Highlights	1
Revenues and Receipts	4
Other Sources of Revenues	4
State and Local Shares	5
Payments in Lieu of Taxes	6
Land Use Planning/Environmental Coordination	8
Energy and Minerals	10
Inspection and Enforcement	11
Oil and Gas Leasing	12
Geothermal Leasing	13
Solid Leasable Minerals	14
Construction and Decorative Materials	14
1872 Mining Law Minerals	15
Alternative Energy Sources	16
Lands and Renewable Resources	17
Lands	17
Rights-of-Way	18
Withdrawal Review	19
Acquisitions	19
Cultural Resources	20
Wilderness Review	21
Livestock Grazing	22
Range Improvement	23
Forestry	24
Special Area Management	25
Wildlife Habitat	26
Wild Horses and Burros	27
Recreation	28
Soil, Water, and Air	29
Hazardous Materials	30
Support Services	31
Fire Management	31
Law Enforcement	32
Engineering	33
Cadastral Survey	33
General Administration	34
Data Management	34
Volunteers	34



Cadastral surveying (past and present) — Program was 200 years old in 1985.

Searles Lake mineral operation near Trona

King Range Conservation Area

Boy Scout volunteers clearing trail

GIs at Chapel, Patton's Desert Training Camp, ca. 1942

Patton Desert Training Camp chapel, 1985

1985 HIGHLIGHTS

During Fiscal Year 1985, the California Bureau of Land Management (BLM) simultaneously carried out a broad range of program activities all in concert with the agency's multiple use mission. Some highlights of the year's efforts are outlined in the following accomplishments:

- Almost doubled the amount of time spent assisting public land visitors in the field, from 1,560 units of patrol in 1984 to 2,798 units in 1985.
- Welcomed the help of 829 volunteers who donated 85,314 hours of their time to help improve the public lands.
- Managed leases that produced 25 million barrels of oil and 10 trillion cubic feet of natural gas, generating more than \$62 million in royalties, bonuses, and rents.
- Designated 10 new Areas of Critical Environmental Concern, covering 36,655 acres, to protect their special values, and added six new Research Natural Areas, covering 26,577 acres.
- Leased 359,031 acres for oil and gas development statewide, an increase of 27 percent from the previous year.
- Generated \$89.7 million in revenues from the public lands for 1985, more than three times BLM's budget for the year.
- Acquired 1,502 acres for public use in the King Range Conservation Area, the Bizz Johnson Trail, and along the Upper Sacramento River.
- Issued 59 geothermal drilling permits, a significant increase from the previous year, and approved 17 geothermal plans of operation, up from four in 1984.
- Began an extensive effort to preserve and interpret the World War II Desert Training Camp created by General George S. Patton in the California Desert.
- Managed a lease for one of the world's largest natural mineral deposits on public lands near Trona; the operation generates \$4.5 million in royalties annually.
- Increased the number of wild horses and burros adopted during the past year by more than 36 percent (1,070 in 1985; 784 in 1984).
- Processed 319 applications for oil and gas drilling, a 28 percent increase from the previous year.
- Fought fires on more than 70,500 acres of public lands during one of the worst and most intensive fire seasons on record.
- Working through California's Campaign Against Marijuana Planting (CAMP), a consortium of Federal, State, and local agencies, eradicated more than 40,285 plants or 130,580 pounds of marijuana from the public lands.
- Leased lands for geothermal energy development that produced enough power to supply the needs of 430,000 people.



*Wind energy at San Geronio
Pass*

*Southern Inyo Wilderness Study
Area*

*Snowbirds visiting California
Desert*

Desert bighorn sheep

*Volunteers clearing portion of
Pacific Crest Trail*

- More than doubled over the previous year (from 51,051 acres to 108,556 acres) the amount of wildlife habitat acres maintained during the year; and improved stream habitat on 82 miles of California rivers, a 40-fold increase over 1984.
- Issued a right-of-way grant for the All American/Celeron pipeline, projected to carry 300,000 barrels of oil a day from California to Texas.
- Inventoried 337,000 acres of wildlife habitat during the year, about 132,000 acres more than in 1984.
- Improved public access to the Pacific Crest Trail, acquiring easements at a cost of \$2 million.
- Sold 6,000 acres of public land, mostly in the metropolitan area of Southern California, for \$4.5 million.
- Recorded an additional 10,891 mining claims during the year, bringing the total to 171,000 on the public lands.
- Completed surveys totaling 2,026 miles, including 13,324 acres of original surveys and 212,884 acres of resurveys.
- Continued the positive cooperation on the Washoe-Modoc Experimental Stewardship Project, one of 16 such projects nationwide.
- Allocated \$72,500 to the Bighorn Research Institute, which matched the funds, to conduct needed bighorn research.
- Increased from 217 to 419 the number of sites on public lands used for monitoring watershed conditions.
- Managed wind energy leases on 6,267 acres that earned \$1.7 million in rental revenues from 3,245 turbines.
- Spent \$600,000 to improve threatened and endangered wildlife species habitat.
- Committed \$375,000 to rehabilitate 17,700 acres burned during last summer's wildfires.
- Completed 13 wild horse and burro herd management plans, more than three times the number completed in 1984.
- Increased the amount of public land timber acreage that was reforested, treated, improved, and thinned.
- Approved a plan of operations for the Mesquite gold mine near Glamis, projected to be the fifth largest gold mine in the world.
- Increased the number of oil and gas lease inspections by 14 percent, from 1,068 in 1984 to 1,215 in 1985.
- Increased interim protection management on more than 6.9 million acres of wilderness study areas.
- Continued to offer "Snowbirds" from cold northern climates long-term camping sites on the public lands along the Colorado River for \$25 per year.
- Continued to shift more of the responsibility for range improvements to benefitting livestock operators.
- Identified and began working with private companies and landowners to control and manage 30 hazardous waste sites on the public lands.

REVENUES AND RECEIPTS

The public lands administered by BLM generate a tremendous amount of receipts for the American people, several times more than the cost of managing the lands. The citizens of California benefit directly from the presence of public lands in their State, through receipts shared with the State and payments made directly to the counties.

FUNDING LEVELS (Figures in millions of dollars)

APPROPRIATION, ACTIVITY & PROJECTS	End of FY 83	End of FY 84	End of FY 85
MANAGEMENT OF LANDS & RESOURCES			
Energy & Minerals Management	\$ 3.09	\$ 3.63	\$ 3.53
Lands & Realty Management	1.63	1.94	2.25
Renewable Resource Development			
Protection & Management	9.91	9.87	10.51
Planning & Data Management	.88	.76	.71
Cadastral Survey	1.90	1.83	1.71
Enforcement	.34	.34	.34
General Administration & EEO	2.56	2.62	2.45
Maintenance	1.15	1.07	1.22
SUBTOTAL	21.46	22.06	22.72
FROM OTHER APPROPRIATIONS			
Acquisition & Construction	.60	.30	.23
Range Improvements	.41	.43	.30
Land & Water Conservation Fund	.43	.38	2.47
SUBTOTAL	1.44	1.11	3.00
TOTAL MANAGEMENT BUDGET	\$22.90	\$23.17	\$25.72

OTHER SOURCES OF REVENUE

The BLM is authorized to accept contributions of money, services, and property for the management, protection, development, and acquisition of public lands. These alternative funding sources enhance BLM's capabilities to provide services and manage resources on the public lands.

During 1985 the partnership between the State of California and BLM in the off-highway vehicle program provided about \$1.7 million for recreation improvements on the public lands. Contributions from other sources for resource related work totaled almost \$414,000.

The BLM is also authorized to recover reasonable costs for processing certain types of lands and realty actions. About \$322,000 for application processing costs of certain rights-of-way and realty were recovered in 1985.

BLM was also reimbursed for work projects completed for other government agencies during the year, amounting to \$755,000. In addition, the Department of Agriculture transferred \$560,000 to the BLM to complete cadastral surveys on U.S. Forest Service lands and forest pest control projects on public lands.

CALIFORNIA BUREAU OF LAND (Figures in millions)

STATEMENT OF PUBLIC LANDS RECEIPTS
Mineral Leases and Permits (Including Simultaneous Oil & Gas Filing Fees)
Sales of Public Lands & Materials
Sales of Public Timber
Fees and Commissions
Recreation Permits, Concessions, and Fees
Grazing Fees (Sections 3 & 15)
Rights-of-Way
Rent of Land
Other
TOTAL

STATE AND LOCAL SHARES

The State of California and its counties receive substantial benefits from the public lands through revenue sharing and other direct payments. From 1973 through 1985, State and local governments in California received \$364.2 million from BLM as their share of revenues collected from the lease or sale of public land resources and as payments for the tax-exempt public lands. The total amount of money paid to California generated from the public lands each year rose from \$2.9 million in 1973 to \$52 million in 1985.

REVENUE SHARING

The State of California receives a percentage of receipts from mineral leasing and production, grazing fees, timber sales, and other user fees.

The largest revenue source is the energy mineral leasing program, which continues to generate more revenues each year. Onshore mineral receipts in California were \$75.7 million in 1982, \$53.5 million in 1983, \$82.5 million in 1984, and \$83.7 million in 1985.

California receives 50 percent of all mineral leasing revenues collected within the State. The State can use the funds for any purpose the legislature directs, with priority given to State subdivisions that are socially or economically impacted by mineral development. The State also receives smaller percentages of grazing fees and revenues from sales of public land and timber.

PAYMENT OF BUREAU OF LAND MANAGEMENT RECEIPTS TO CALIFORNIA AS OF SEPTEMBER 30, 1985 (Figures in millions of dollars)

Mineral Leases and Permits (also reflects previous gains)	\$41.83
Forage Receipts Outside Taylor Grazing Districts (Section 15)	.12
Forage Receipts Inside Taylor Grazing Districts (Section 3)	.02
Sale of Public Land and Timber	.11
TOTAL	\$42.08

Fifty percent of mineral leasing revenues go to the State of California



MANAGEMENT RECEIPTS of dollars)

FY 1983	FY 1984	FY 1985
\$53.50	\$82.50	\$83.66
1.60	1.40	2.70
.70	1.60	1.10
.10	.20	.08
.13	.20	.11
.43	.50	.52
.32	1.90	1.16
.06	.07	.25
.22	—	.08
\$57.06	\$88.37	\$89.66

PAYMENTS IN LIEU OF TAXES

In 1976, Congress passed the Payments in Lieu of Taxes Act to provide Federal payments to those areas where large portions of land are in Federal ownership and exempt from local property taxes. These funds can be used for any purpose directed by the county.

Payments are computed according to a complex formula that takes into account population statistics and acreages of certain Federal lands in the counties, including BLM lands, National Forest System lands, National Park System lands, National Wildlife Reserve Areas, Federal water resource development lands, dredge disposal areas administered by the Army Corps of Engineers, inactive and semi-active Army installations, and certain lands donated to the United States.

The formula also requires the State to submit data on the amount of revenue sharing funds received by the counties in the preceding fiscal year. Those amounts are deducted from the PILT payment for the current year.

In Fiscal Year 1985, \$26.4 million was deducted from PILT payments as a result of the revenue sharing provision, more than twice the total for the previous year. This resulted in slightly lower PILT payments in 1985.

Since the payments began in September 1977, California counties have received \$98 million; of that amount, \$9.9 million was paid in 1985. A county by county breakdown is shown on the following page.



State Director Ed Hastey with public group

PAYMENTS-IN-LIEU OF TAXES

COUNTY	ENTITLEMENT ACRES	FY 1983	FY 1984	FY 1985
Alameda	4,778	1,319	1,341	3,480
Alpine	407,055	38,342	38,986	39,530
Amador	87,594	8,268	8,392	8,506
Butte	150,375	14,178	14,408	14,603
Calaveras	152,097	14,350	69,112	14,770
Colusa	100,898	9,502	39,574	13,791
Contra Costa	2,071	1,060	1,078	1,508
Del Norte	461,208	43,465	44,185	44,788
El Dorado	527,302	49,437	50,336	133,650
Fresno	1,488,150	256,172	626,408	144,601
Glenn	204,562	19,277	53,727	19,865
Humboldt	469,705	1,488,546	1,572,451	1,534,841
Imperial	1,190,733	648,379	671,467	625,369
Inyo	5,489,525	485,741	493,902	498,174
Kern	1,095,636	590,442	671,208	608,078
Kings	10,403	5,414	5,423	6,080
Lake	378,851	35,724	36,295	36,790
Lassen	1,640,534	155,342	157,950	159,312
Los Angeles	677,667	476,300	413,622	462,025
Madera	498,490	87,533	223,650	48,408
Marin	75,101	108,687	105,790	92,185
Mariposa	511,556	153,020	302,586	159,484
Mendocino	299,863	29,235	95,285	31,104
Merced	41,875	28,788	29,437	29,995
Modoc	1,694,977	159,310	161,987	164,600
Mono	1,711,724	161,239	163,949	166,225
Monterey	342,947	268,112	268,710	238,545
Napa	61,094	42,778	42,814	12,314
Nevada	185,646	17,520	17,809	18,028
Orange	54,655	19,136	37,847	32,093
Placer	362,887	33,830	34,399	61,042
Plumas	1,147,182	108,867	109,829	111,403
Riverside	2,360,919	917,520	944,569	904,318
Sacramento	4,052	3,030	3,081	2,951
San Benito	125,633	78,705	81,444	82,659
San Bernardino	7,675,160	759,237	737,568	748,416
San Diego	467,077	310,022	300,731	326,250
San Francisco	2,386	12,470	12,679	15,327
San Joaquin	1,246	881	896	908
San Luis Obispo	240,139	228,276	214,861	147,242
San Mateo	1,426	-0-	-0-	26,398
Santa Barbara	660,636	450,778	453,432	395,755
Santa Clara	7,682	5,079	736	746
Santa Cruz	12	-0-	-0-	-0-
Shasta	975,650	90,650	220,497	94,745
Sierra	423,076	40,349	40,537	41,085
Siskiyou	2,559,263	236,162	240,976	248,530
Solano	4,495	3,271	3,230	3,274
Sonoma	24,121	2,339	2,311	2,342
Stanislaus	5,403	3,405	3,543	3,763
Sutter	2	110	113	-0-
Tehama	442,933	41,749	42,473	43,048
Trinity	1,513,167	141,885	144,316	146,944
Tulare	1,525,580	648,422	722,218	580,240
Tuolumne	1,104,805	111,992	513,575	107,288
Ventura	574,861	448,337	451,524	465,979
Yolo	28,414	19,501	19,331	16,206
Yuba	49,426	4,658	4,738	4,800
	42,304,705	\$10,127,144	\$11,733,221	\$9,944,401

LAND USE PLANNING ENVIRONMENTAL COORDINATION

With millions of acres to administer and a multitude of resources to manage, BLM faces a challenge in determining appropriate uses of each parcel of public land. Planning for such uses and evaluating the potential environmental impacts of proposed actions are vitally important to BLM's overall effectiveness. Both these efforts are the backbone of all BLM operations and include broad opportunities for the public to participate in helping to make critical land use decisions.

BLM currently has land use plans completed to direct the management of every acre of public land in California. Those plans occasionally require revision and updating to respond to changing demands or resource conditions. During 1985, a major planning effort for the Coast/Valley Planning Area was completed. This Resource Management Plan and its accompanying environmental impact statement (EIS) analyzed various alternatives for management of 236,000 acres of public lands in Kern, Kings, San Luis Obispo, Santa Barbara, Tulare and Ventura Counties. The management decisions resulting from that study will guide future actions in those areas for many years.

When the existing plan is still viable, but changes need to be made to portions of the plan, BLM prepares a plan amendment. During 1985, amendments were made to the California Desert Plan and efforts were initiated to amend the Sierra Management Framework Plan, involving public lands in the central Sierra foothills, from Yuba and Nevada Counties in the north to Mariposa County in the south.

Any plan is only as effective as its implementation. In California, plan reviews are conducted each year by BLM State Director Ed Hastey to assure the plans are being properly implemented. Four of these reviews were conducted in 1985 for the Surprise (northeastern California, northwestern Nevada); Folsom (central valley); Bishop (east-central California); and Arcata (north coast) BLM Resource Areas.

Making sure all the activities allowed on public lands are environmentally responsible is another important aspect of BLM's operations. During 1985, a number of major environmental analysis efforts were completed in California, including the one accompanying the Coast/Valley Planning effort described above. Another example, the All American/Celeron and Getty Pipelines EIS, actually covered two major pipeline projects in Southern California. They were analyzed in one EIS because the routes were similar.

In addition to these major EISs, environmental reviews were also conducted on more than 100 proposals for mini or small hydro power projects to ensure compliance with Federal regulations, and hundreds of individual environmental analyses were conducted throughout California on a variety of site specific projects not requiring a full-scale EIS.

POLICY

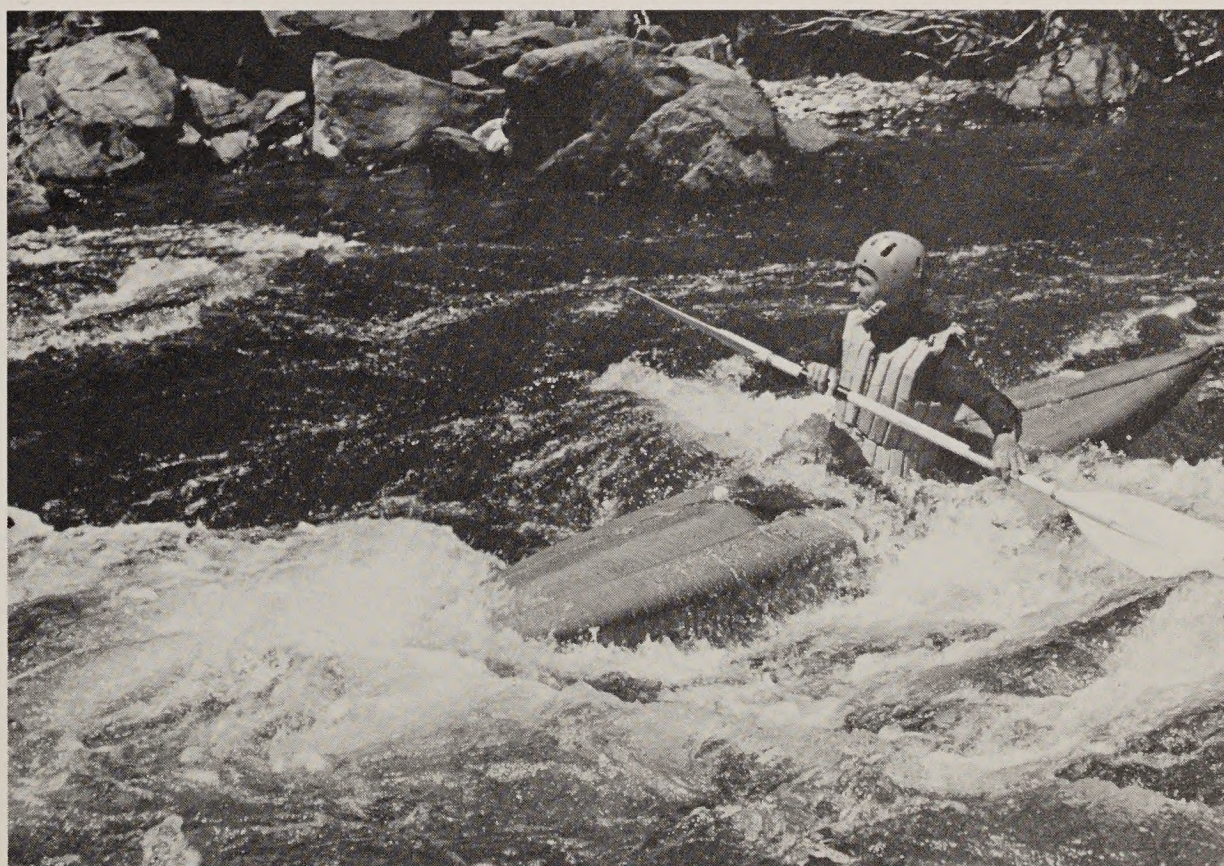
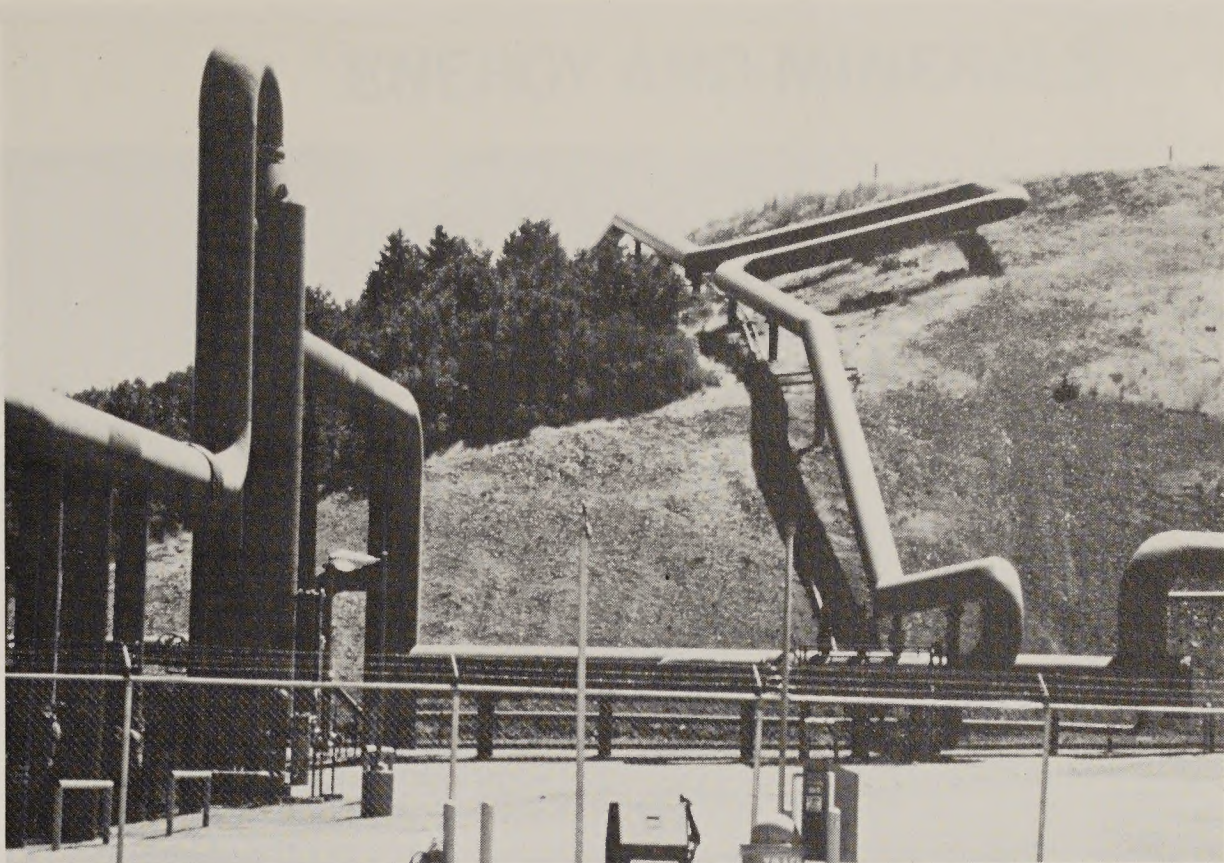
The Federal Land Policy and Management Act of 1976 directs BLM to prepare and land use plans. Under BLM policy, all plans must:

- follow the principles of multiple use and sustained yield;
- use a systematic, interdisciplinary approach;
- identify, designate, protect, and manage areas of critical environmental concern;
- consider the relative importance of public land products, services and use to local economies;
- rely on the inventory of public lands, their resources, and their other values;
- consider present and potential uses of the public lands;
- consider the impact of Federal actions on adjacent or nearby non-Federal lands;
- consider the relative scarcity of values involved and the availability of alternative sources;
- weigh long-term benefits and consequences of proposed actions against short-term benefits and consequences;
- comply with applicable pollution control laws, including State and Federal air, water, noise, and other pollution control standards and plans;
- to the extent consistent with public laws, coordinate with the resource planning and management efforts of other government agencies and Indian tribes;
- provide the public with early notice and frequent opportunities to participate in the preparation of plans.

The 1969 National Environmental Policy Act directs that all Federal agencies prepare environmental impact statement (EISs) on any proposal that may have a significant impact on the human environment. In carrying out its responsibilities under the Act, BLM follows regulations issued by the Council on Environmental Quality, an executive office of the President.

The Council states that all EISs must address the environmental impacts of the proposed action, any adverse environmental effects which cannot be avoided; alternatives to the proposed action; the relationship between short-term uses and maintenance of long-term productivity; and any irreversible and irretrievable commitments of resources which would be involved if the proposed action were implemented.

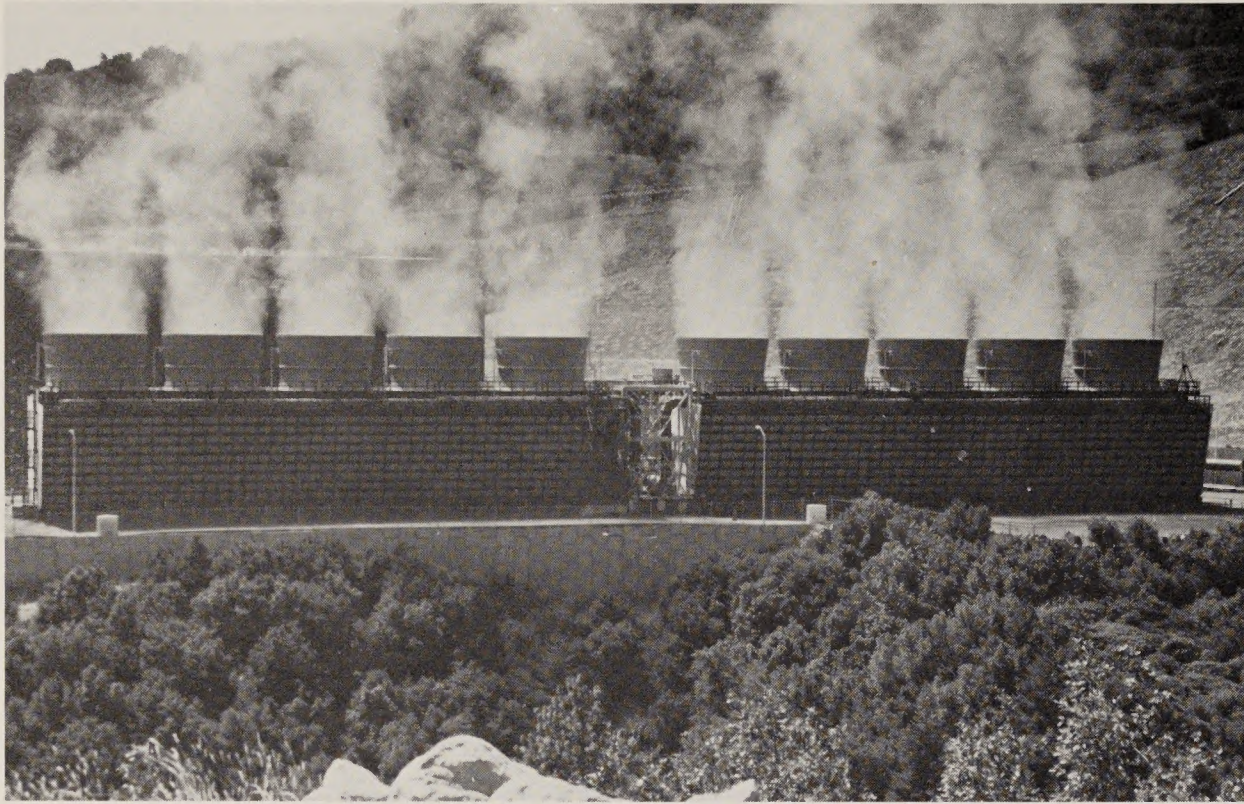
The regulations also require extensive public participation in the process, including early identification of issues to be analyzed and comments on the draft document before final preparation.



Geothermal lease operation

Fish Slough Area of Critical Environmental Concern

Whitewater recreation along the North Fork of the American River



POLICY

BLM policy for management of mineral and energy resources on public lands reflects a number of important acts of Congress: the Mining and Minerals Policy Act of 1970; the Federal Land Policy and Management Act (FLPMA) of 1976; the National Materials and Minerals Policy, Research, and Development Act of 1980; as well as the basic Mineral Leasing Act of 1920 and the Mining Law of 1872 as amended.

The Mining and Minerals Policy Act of 1970 declares that it is the policy of the Federal government to encourage private development of a stable domestic minerals industry and to foster the orderly and economic development of domestic mineral resources.

FLPMA directs that public lands be managed in a manner recognizing the Nation's need for domestic sources of minerals.

The 1980 National Materials and Minerals Policy, Research and Development Act requires the Secretary of the Interior to improve the quality of minerals data in Federal land use decisionmaking.

The Mineral Leasing Act of 1920 authorizes Federal leasing of public lands for private extraction of oil, gas, phosphate, sodium, and other minerals.

The 1872 Mining Law allows for the exploration, development, and acquisition of public lands for mineral development.

The public lands are an important source of the Nation's mineral and energy resources, some of which are critical and strategic. BLM is responsible for making public lands available for orderly and efficient development of these resources within the framework of balanced multiple-use management.

Geothermal plant cooling towers

Leaching pond at mining operation

Rock crusher at Gold Fields operation near El Centro

ENERGY AND MINERALS

The following principles guide BLM in managing mineral resources on public lands:

- BLM encourages and facilitates the development of public land mineral resources in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices.
- Public lands remain open and available for mineral exploration and development unless withdrawal or other administrative action to restrict such activities is clearly justified and in the national interest.
- BLM processes mineral patent applications, permits, operating plans, mineral exchanges, leases, and other use authorizations for public lands in a timely and efficient manner.
- BLM land use plans reflect geological, energy and mineral values on public lands through more effective geology, energy, and mineral resource data assessment.
- BLM monitors salable and leasable mineral operations to ensure proper resource recovery and evaluation, to verify production, to ensure proper diligence, and to enforce lease, sale or permit terms.
- BLM ensures receipt of fair market value for mineral commodities unless otherwise provided by statute.
- BLM maintains effective professional, technical, and managerial personnel knowledgeable in mineral exploration and development.

Making public lands available for wise energy and mineral development is one of BLM's most important functions. With demands growing throughout the United States, especially in California, the public lands are continuing to play an ever-increasing role in supplying these needs. BLM's job is to ensure this necessary development is done in an environmentally sensitive manner.

BLM inspector at Searles Lake



INSPECTION AND ENFORCEMENT

The BLM inspects lease operations and enforces compliance with applicable laws, regulations, lease terms and permit conditions to ensure human safety, conservation of the resource, and protection of the environment. Among these laws is the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) which requires BLM to inspect oil and gas wells to ensure operators have complied with technical and environmental terms of the lease and have reported oil and gas production correctly for royalty accounting purposes.

BLM issued regulations to implement provisions of FOGRMA in 1984. Further work was done on those regulations in 1985 because of comments from the public that the rules exceeded the law's requirements. BLM held public hearings to gather suggestions for revision and expects to re-issue the regulations for additional public review in early 1986.

Carrying out the law's mandate was BLM's number one priority in the oil and gas leasing program in 1985. Last year, 290 oil and gas leases were supervised on Federal lands in California by BLM. 319 applications to drill were processed. Finally, BLM conducted 1,215 inspections of these operations during 1985, an increase from the 1,068 inspections conducted during 1984.

OIL AND GAS LEASING

California's oil and gas leasing program is nationally significant and the Federal lands and the BLM play a major role. Four oil fields in Kern County, including both public and private lands, were ranked among the top 10 producing fields in the country last year. Production from Federal leases occurs in nine other California counties.

These 2,680 leases cover 3.6 million acres and produced 25 million barrels of oil, 10 trillion cubic feet of natural gas last year, and 8.5 million gallons of distillate (a diesel fuel-like substance), netting \$62 million in royalties, bonuses, and rents, half of which went directly to the State of California.

Under the Mineral Leasing Act of 1920 and the Mineral Leasing Act for Acquired Lands of 1947, the BLM is for responsible oil and gas leasing on public lands, national forests, acquired lands, and private land in California where mineral rights have been retained by the Federal Government.

The 1920 Mineral Leasing Act provides for both competitive and noncompetitive leasing of Federal lands for oil and gas development. This is accomplished through three types of leases:

- **Competitive** – Areas designated for competitive leasing, called Known Geologic Structures (KGSs), are leased by competitive bid. There are 130 KGSs in California, covering 592,654 acres;
- **Over-the-counter** – Federal lands available for oil and gas development generally are leased for the first time noncompetitively on a first-come, first-served basis, called over-the-counter leasing, to qualified applicants; and
- **Simultaneous** – If the lands were previously leased, they are subsequently leased through the BLM's simultaneous system (often called the oil and gas lottery) in which the lease is awarded to the first eligible applicant randomly drawn from a pool of applicants.

During 1985, a total of 287 leases covering 359,031 acres were issued by BLM in California, including 10,632 acres by competitive bid, 264,685 acres by over-the-counter applications, and 83,714 acres through the simultaneous system.

More than 160 operators were actively engaged in drilling and producing oil and gas from some 350 Federal leases in California during 1985. BLM processed 319 permits to drill on these leases last year.

The number of leases issued by BLM increased by almost a third in 1985 over 1984. Most of the increase occurred in the simultaneous leasing system, where the number of leases issued increased from 97 in 1984 to 137 leases in 1985. A doubling of competitive leases issued in 1985 added to the increase, as 60 leases were issued in 1985, compared to only 27 in 1984.

Other BLM initiatives in 1985 included efforts to improve methods for determining KGSs, an intensive study to determine the extent of drainage of oil and gas resources from the public lands, and draft regulations issued in May 1985 for public comment concerning increased bonding coverage of oil and gas and geothermal lease operations.

OIL AND GAS LEASING

	1983	1984	1985
Leases Issued	208	217	287
Assignments	1,086	373	266
Permits to Drill Processed	200	250	319
Simultaneous Oil and Gas Lease Applications Processed	95	97	136

Midway-Sunset field in Kern County, one of top 10 producers in U.S.

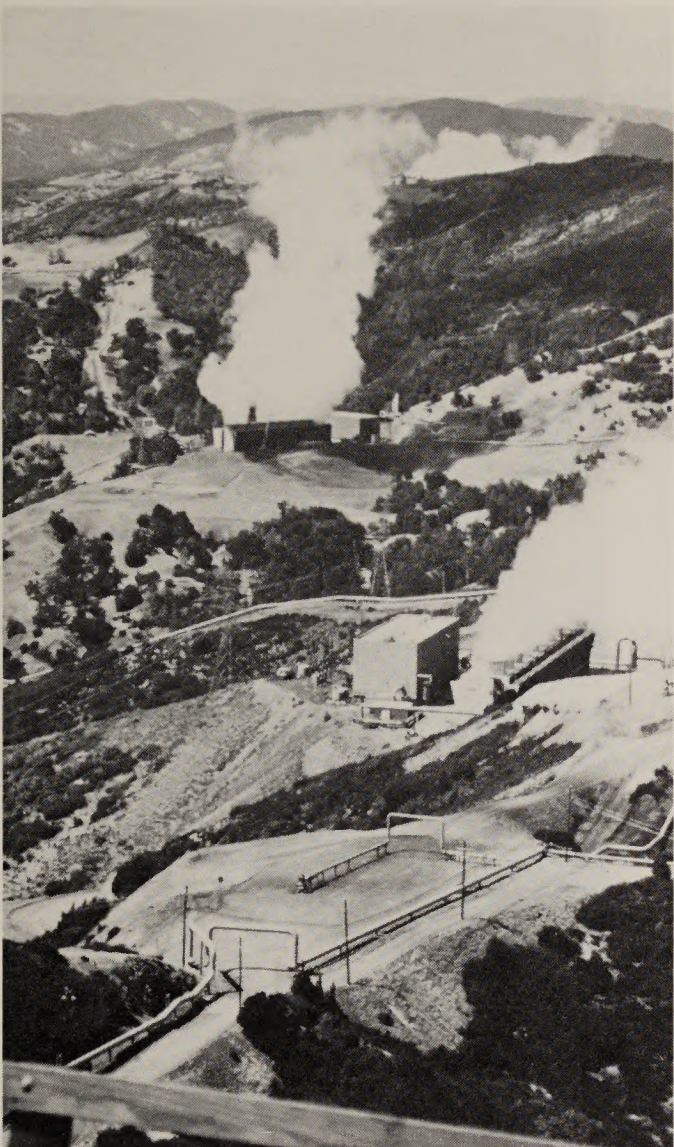


Santa Fe Energy Co. executive at company's Midway-Sunset field

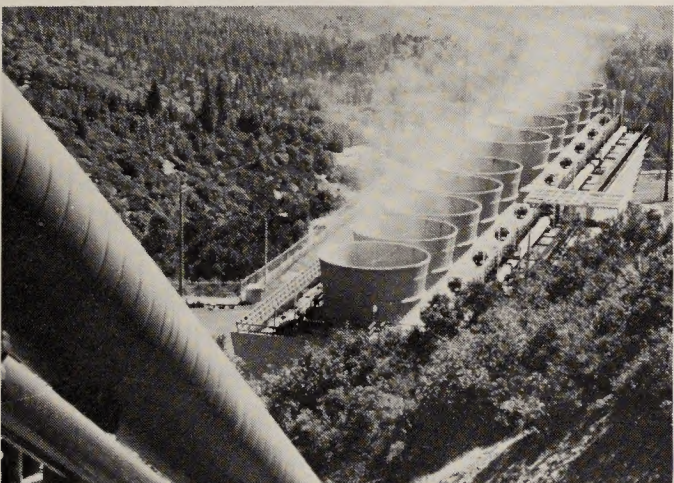
LEASES ISSUED – 1985

	LEASES	ACREAGE
Noncompetitive (Public Domain)	84	244,251
Noncompetitive (Acquired Lands)	5	20,434
Simultaneous Filings (Public Domain, Acquired)	136	83,714
Competitive (Public Domain)	60	10,240
Competitive (Acquired Lands)	2	392
TOTAL	287	359,031

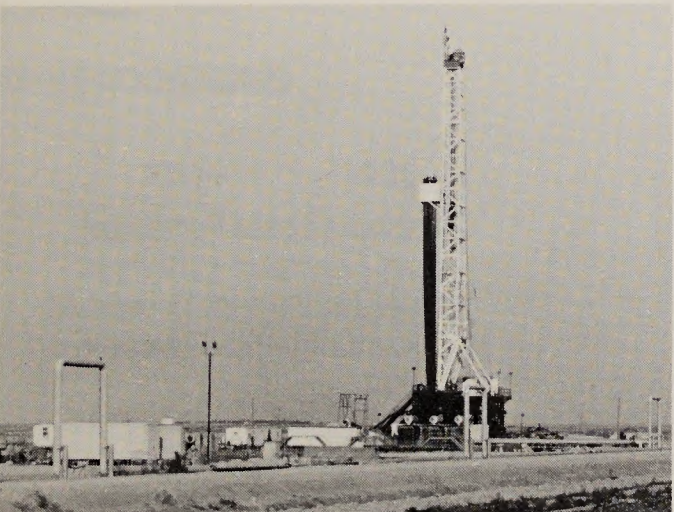
GEOTHERMAL LEASING



The Geysers, north of San Francisco



Geothermal cooling towers



Geothermal project at Salton Sea

California is the world leader in geothermal energy production and about one-third of that production comes from Federal lands leased by BLM.

Federal leases are an important part of the largest geothermal powerplant in the world at the Geysers, north of San Francisco. The first powerplant to be constructed in the Imperial Valley is on a Federal lease administered by BLM. Geothermal exploration, development, and production occurs in all four BLM districts in California.

In 1985, these lands produced 430 megawatts of power, enough to supply the needs of about 430,000 people. The 12 producing leases, encompassing 69 producing wells, generated \$13 million in royalties last year. In addition, \$7.6 million was collected from geothermal bonuses and rents during the year. Half of these revenues went to the State of California.

There are currently 310 Federal geothermal leases in California covering some 547,216 acres. Most of the potential or attractive Federal geothermal resources are already under lease, which explains the lower number of new leases issued during 1985. The industry's emphasis is now shifting to exploration and development.

The BLM's geothermal program is conducted under the Geothermal Steam Act of 1970. Lands with known geothermal resources are designated as Known Geothermal Resource Areas or KGRAs and are leased competitively. Areas not within KGRAs may be leased to the first qualified applicant on a first-come, first-served basis. All leases are for 10-year terms and diligent exploration of leases is required.

BLM issued 59 geothermal drilling permits during 1985, more than double the amount issued in 1984. BLM approved 17 geothermal plans of operation, up from four in 1984, along with four geothermal unit agreements. Other program efforts focused on inspecting operations to assure compliance with laws, regulations, and lease terms, and monitoring production so proper royalty payments can be assessed.

During 1985, about 9,376 acres were leased within KGRAs, receiving high bonus bids of \$323,851. An additional 57,321 acres were leased noncompetitively.

The outlook for geothermal production on Federal lands in California looks bright for 1986. Four new power plants are scheduled to come on line during the year on Federal leases in the Geysers and Imperial Valley. These plants will generate an additional 296 megawatts from Federal geothermal resources. Development activity of proven resources at Coso Hot Springs in the Mojave Desert will increase steadily and exploration activity in northeastern California is also expected to rise.

GEOTHERMAL LEASING

	1983	1984	1985
Competitive Leases Issued	17	9	1
Noncompetitive Leases Issued	15	52	33

SOLID LEASABLE MINERALS

In addition to oil, gas, and geothermal resources, BLM is also responsible for leasing a number of other important minerals that are used by industry and in a number of everyday products used by the public. These include phosphate, potassium, sodium (salt), sulphur, asphalt, gilsonite, chlorides, sulphates, carbonates, borates, silicates, and nitrates.

In California, mineral exploration and mining operations are being conducted on 48 Federal leases.

The largest of these operations is Kerr-McGee's Argus Facility in Searles Lake near Trona, just north of the Mojave Desert, that extracts a number of important minerals from the crystallized lake bed. These minerals are used in a variety of everyday products, including soda ash, a principal ingredient of glass. The 126-acre operation, mostly on public land, generates about \$4.5 million in royalties annually. Other leases include four salt mines and one large sand and gravel operation on Indian lands in Southern California.

The Mineral Leasing Act of 1920 provides for both competitive and noncompetitive leasing of these minerals. In California, about 95 percent of the program is noncompetitive. Prospecting permits are issued prior to noncompetitive leases, and discovery of a valuable deposit entitles the permittee to a lease if certain terms and special conditions of the prospecting permit are met.

These leases, called preference right leases, have a 20-year term and can be renewed or readjusted in future years. Different rental and royalty rates apply depending on the mineral involved.

In addition, minerals such as gold and silver are leased on all lands acquired by the United States government. BLM is responsible for processing permit and lease applications, approval of exploration and mining plans, preparation of environmental analyses, inspection and enforcement, verification of production for royalty collections, and approval of reclamation and abandonment plans to close down completed operations.



Mining operation

CONSTRUCTION MATERIALS

Making construction materials, such as building stones, available to the public through minerals management.

The basic authorities for these activities are the Mineral Leasing Act of 1920 and the Surface Resources Act of 1955. They are available under free-use permits to public groups for road construction and other purposes. They are offered for sale competitively to individuals for exclusive use of material from common use areas.

CONSTRUCTION AND I

- Trespass Cases Processed
- Sales Contracts Processed
- Free Use Permits Processed
- Community Pits Established

SOLID LEASABLE MINERALS

	1983	1984	1985
Lease Applications Processed	12	3	6
Prospecting Permits Processed	26	13	7
Environmental Assessments Completed	29	4	3
Inspections/Compliance Checks Conducted	75	98	116
Exploration/Mining Plans Processed	15	11	10
Mineral Reports Completed	15	3	5



Argus facility near Trona



on public lands

AND DECORATIVE ALS

as sand and gravel, cinders, and
is another important aspect of BLM

ties are the Materials Act of 1947
5. These "common variety" minerals
States, counties, and nonprofit
activities. For commercial users,
or noncompetitively. Some sales are
of a site, while other sales are made
for community pits.

ORATIVE MATERIALS

1983	1984	1985
8	3	12
102	82	74
144	105	79
5	1	1

1872 MINING LAW MINERALS

Gold, silver, and other hardrock minerals governed by the 1872 mining law were vitally important in California's early days and continue to be an important contributor to the State's economy.

The public lands have historically been the focus of these mining activities and remain in the forefront. As a recent example, a massive new gold mining operation, the Mesquite mine, slated to be the fifth largest in the world, was under construction during 1985 on BLM-administered lands near Glamis in Southern California. Another major operation is Homestake Mining Company's McLaughlin gold mine near the junction of Lake, Yolo and Napa Counties. This open pit mine, partly on public land, produces more than 20,000 tons of ore per day.

The 1872 mining law encourages the search for these valuable minerals by allowing miners to locate claims on the public lands and mine the resource. The discoverer of a valuable mineral deposit has a right to acquire title to the acreage.

Subsequent legislation, particularly the 1976 Federal Land Policy and Management Act (FLPMA), set additional requirements, including having miners record their claims with BLM and file annual proofs of labor or notices of intent to hold their claims for another year.

FLPMA also directs BLM to "prevent unnecessary or undue degradation of the public lands" and limits mining activities within wilderness study areas. Two sets of regulations were issued by BLM, in 1980 and 1981, to implement these directives. A major element of both regulations is a requirement that BLM work closely with miners through plans of operations to guide mineral development in an environmentally sound manner.

The BLM is responsible for recording claims, notices, and proofs of labor, reviewing plans of operation, and processing applications for mineral patents. There are more than 171,000 mining claims currently on record with California BLM. Miners filed seven new applications for patents or title to mining claims on public lands and national forests during 1985; six applications were processed; and three patents were issued during the year.

1872 MINING LAW MINERALS

	1983	1984	1985
Plans of Operation Reviewed	201	62	167
Notices Reviewed	89	104	134
Mineral Patent Applications			
Processed	15	5	6
Mining Claims Recorded	17,721	23,280	10,891



Validity examination, small gold mine

ALTERNATIVE ENERGY SOURCES

California has long been in the forefront for developing alternative energy sources and the public lands have contributed to these innovations. Wind energy and mini-hydro electric projects are all using public lands to help contribute to the State's growing energy demands; other innovative applications are in the testing stage.

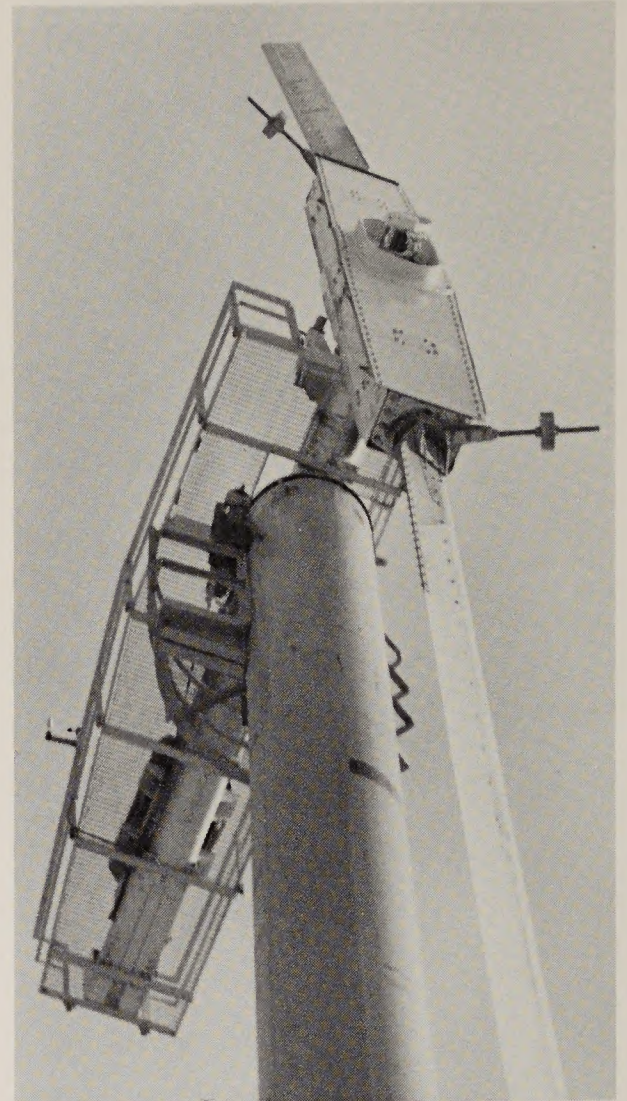
In California, wind is a proven energy source — renewable, clean, and abundant in certain areas. Harnessing this energy by generating electricity through large, wind-driven turbines or propellers is a new and growing public land activity.

In the San Geronio Pass area of Riverside County, 3,322 acres of Federal lands are presently being used for wind energy production or encompass areas where wind farms will shortly be established. Total income to the Federal Treasury is \$1.4 million from rentals and a total of 2,945 turbines have been constructed or are under construction. In the Tehachapi Mountains, 1,340 acres are under lease with 300 turbines constructed on public lands. These leases generate \$340,000 annually to the Treasury.

Another interesting energy idea is using the salty brine from California's dry lakes to generate electricity. On Danby Lake near Twentynine Palms, an energy company is experimenting on public lands to see if the application is cost-effective. Forcing compressed air into underground cavities and then using it to generate electricity is another energy proposal in the experimentation stage near Bristol Dry Lake in Southern California. The company involved is currently drilling holes to see if the proper geology is present to get the project into operation.

Finally, use of public lands for small hydro projects to generate electricity from California's rivers is another increasing activity. By the end of Fiscal Year 1985 10 such projects existed, and BLM was reviewing applications for more than 100 future projects throughout the State.

Wind park at Tehachapi Pass



Wind machine

POLICY

BLM encourages, as a national and State policy, the development of alternate energy sources and accommodates small power producers where possible.

Use of the public lands for wind energy development projects is authorized by a right-of-way grant subject to the policy considerations governing rights-of-way in general.

Where competitive interest exists for a particular site, the grant is awarded by a competitive bid process to maximize the return for the use of the public lands.

Other alternative energy exploration is authorized by temporary use permits during the early stages and rights-of-way grants once permanent facilities are planned.

LANDS AND RENEWABLE RESOURCES

POLICY

BLM's lands and realty programs provide services to the public — including individuals, businesses and local and State governments.

Major responsibilities include evaluating and processing applications for leases, permits, and rights-of-way to use public lands, identifying and offering lands for sale, and working with the States or individuals to exchange lands. Other important activities are processing new applications for withdrawals and reviewing past withdrawals made to other Federal agencies.

Policies for BLM's lands and realty programs are based on several sections of the Federal Land Policy and Management Act of 1976 (FLPMA). The initial policy statement of FLPMA states that the public lands will be retained in Federal ownership unless it is determined that disposal of the particular parcels would serve the national interest.

Two other general principles are that the U.S. government receive fair market value for the use of the public lands and their resources unless Congress makes special exceptions and that sales or transfer of public land, acquisition of private land for public purposes, and land exchanges be consistent with BLM's resource management responsibilities.

Sales of BLM-administered lands may take place when one of three criteria stated in FLPMA is met. The parcels offered for sale must be: 1) uneconomical or difficult to manage; 2) originally acquired by the Federal government for a particular purpose and no longer needed for that purpose; or 3) needed to achieve important public objectives such as community expansion or economic development.

BLM's policy on land exchanges, issued in 1983, states that land exchanges are in the public interest when both parties benefit, by eliminating inholdings, improving management areas and/or by increasing economic returns. BLM has the responsibility to work closely with other Federal agencies, State, and local governments and the private sector to complete mutually beneficial exchanges.

LANDS

Sales, exchanges, acquisitions, and transfers of lands for recreation and public purposes are important uses of the public lands in California. These activities, authorized by the 1976 Federal Land Policy and Management Act, help communities, other government agencies, and the public, as well as enabling BLM to more effectively and efficiently manage the public lands.

During 1985 BLM's lands program focused on offering lands for sale, exchanging lands to benefit the public, transferring lands for recreation and public purposes, and completing the transfer of responsibility for authorizing land actions down to local BLM offices.

Land sales were a high priority, with more than 6,000 acres sold in 1985, generating \$4.5 million in revenues. Most of these sales occurred in the metropolitan area of Southern California where lands sold were isolated and difficult for BLM to manage. Another 6,500 acres were offered, but were not sold; these lands are currently available on a first-come, first-served basis at BLM district offices. All BLM lands are sold at not less than fair market value through sealed bids.

Nine land exchanges were completed this year, resulting in 5,500 acres being transferred to private ownership and the Federal government acquiring 4,600 acres. These exchanges allow BLM to acquire lands with important public values, such as adding critical parcels to the King Range Conservation Area and acquiring high recreation value lands along the Sacramento River.

The Recreation and Public Purposes Act allows BLM to transfer lands to other governmental agencies or nonprofit groups for authorized uses at no cost or less than fair market value. In 1985, BLM authorized 16 transfers involving 4,800 acres. These transfers ranged from 2.5 acres to 3,000 acres and included lands for schools, a church, gun clubs, rifle ranges, additions to two State Parks, and other public projects.

Under the State selection program, BLM also transferred 2,900 acres to the State of California, satisfying an additional portion of the State's remaining entitlement from the Federal government.

Finally, BLM completed in 1985 the decentralizing of decision-making authority on land use applications to BLM local district and area offices. This process, begun several years ago, has enhanced the public's ability to participate directly with responsible officials and increased BLM's ability to process such requests in a timely, efficient manner.



An archery range near Redding on BLM Recreation and Public Purposes lease

RIGHTS-OF-WAY

BLM grants public land rights-of-way for a variety of private and public purposes, such as roads, trails, pipelines, powerlines, canals, communication sites, and reservoirs.

During 1985, BLM was involved in various stages of the right-of-way granting process for a number of major projects on the public lands in California, including two interstate pipelines, two power plants, three interstate transmission lines, and four wind generating developments.

One of these included a grant issued in May 1985 for the All American/Celeron pipeline to cover 1,100 miles from Los Flores Canyon, California to McCamey, Texas. The pipeline, now under construction, will be capable of carrying 300,000 barrels of crude oil from various sources in California and tie into an existing pipeline network in western Texas.

A number of other major right-of-way proposals were under study in 1985. A pipeline similar to the All American/Celeron project has been proposed by Texaco Trading and Transportation Inc./Getty to transport 100,000 to 400,000 barrels of crude oil from Santa Barbara County in California to the Texas Gulf Coast.

The proposed Pacific-Texas crude oil pipeline will originate from the Port of Los Angeles and terminate in Midland, Texas. A 30-inch heated pipeline, the Southern California Pipeline System, has been proposed to carry Alaska North Slope and Santa Barbara crude oil from Santa Barbara County to Los Angeles. Almost two-thirds of the nearly 180-mile route closely parallel the All-American/Celeron and Texaco/Getty routes.

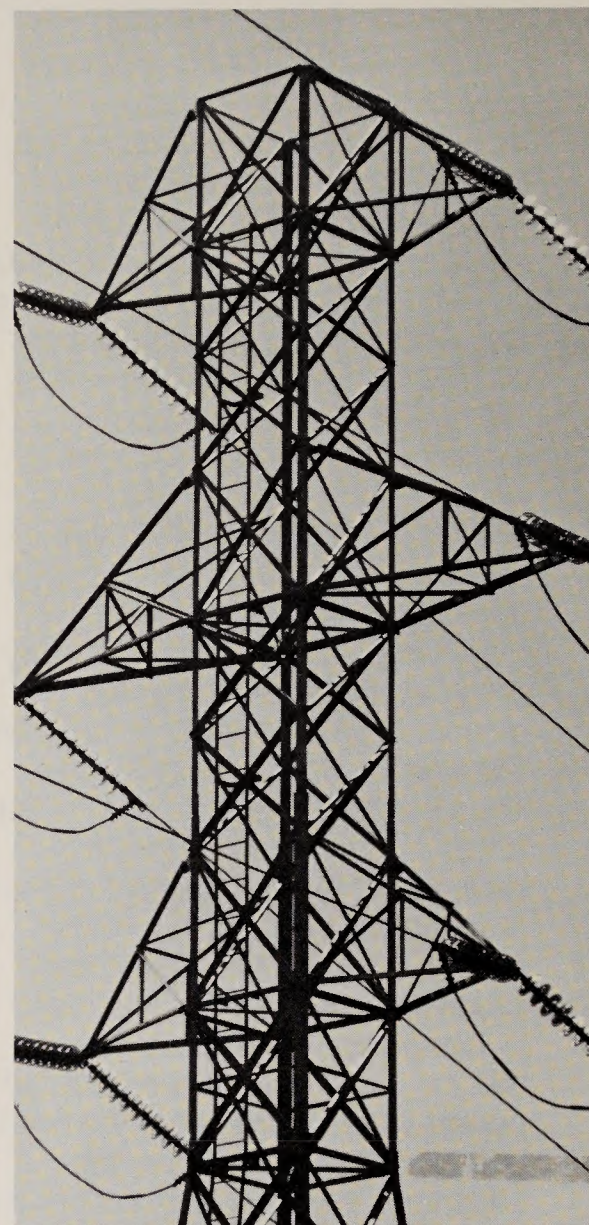
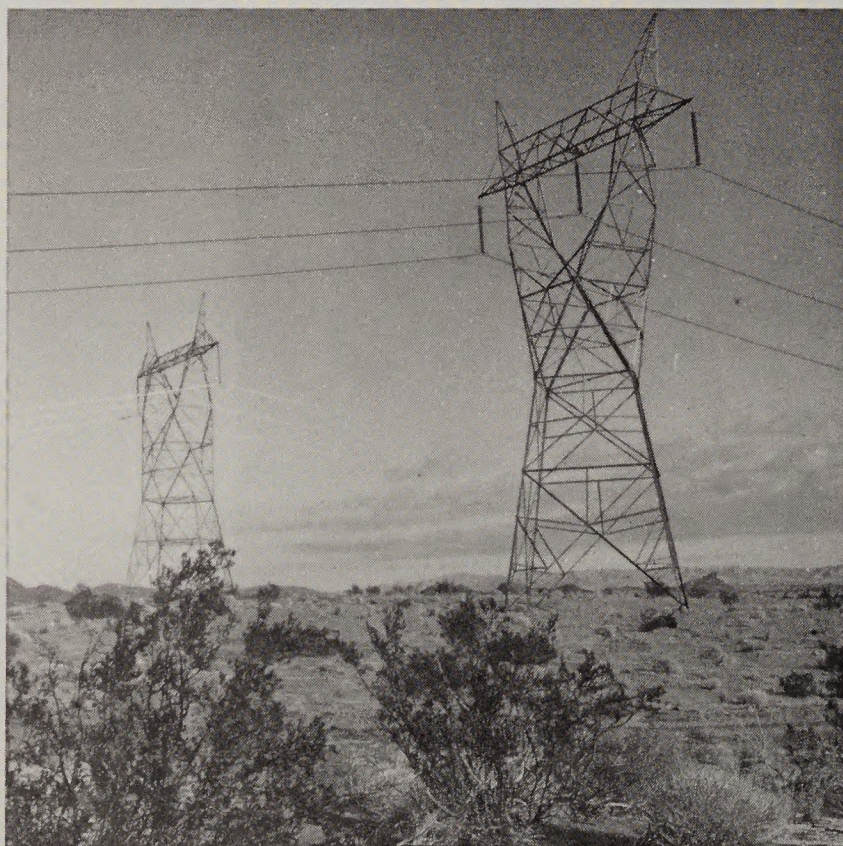
Other projects worked on in 1985 included: the San Joaquin and Angeles oil pipelines, the Kern River/Mojave natural gas pipeline, as well as seven major transmission lines.

RIGHTS OF WAY

Grants Issued
Applications Processed

1985
304
346

Transmission line east of Barstow



High voltage powerline

POLICY

BLM's policy in issuing rights-of-way, or authorizing roads, pipelines, powerlines, etc., to cross public lands, is to meet the needs of the public and other governmental agencies for access.

Primary guidelines include: receiving fair market rental for use of public lands and their resources; expeditiously processing rights-of-way applications in an economically, socially, and environmentally sound manner; using the "corridor" concept to the extent practical to minimize adverse environmental impacts and proliferation of separate rights-of-way; and limiting the boundaries of rights-of-way to the land actually necessary for the operation and maintenance of the project.

Bizz Johnson Trail near Susanville



POLICY

BLM's policy and procedures for acquiring access, lands, and interests in lands are contained in the Federal Land Policy and Management Act of 1976 and many other laws dealing with specific types of access or acquisitions.

The access and acquisition program is crucial to BLM's land and resource management and administrative activities. Land managers and the public must have access to manage, protect, and use the public lands and resources.

The guiding principles of the acquisition program are to provide satisfactory physical and legal access so the public can reach public lands; to acquire necessary administrative sites; to purchase valuable recreation lands as directed by Congress through the Land and Water Conservation Fund; and to acquire easements or the right to use lands for rangeland improvement.

WITHDRAWAL REVIEW

The Federal Land Policy and Management Act directs the Secretary of the Interior to review all existing withdrawals and land classifications on the public lands as well as certain other Federal lands to determine if they are still necessary and if they should be continued or terminated.

Withdrawals are actions officially taken to close public lands to certain activities, such as land sales, mining claims, or mineral leasing. Classifications, most done in the 1960s as a type of early land use planning, designated public lands for certain uses and sometimes closed areas to specific activities.

A statewide inventory of withdrawn lands, completed by BLM in 1979, found 12.9 million acres of land classifications and 8.4 million acres of withdrawals in California. By the end of 1985, about 4.4 million acres of withdrawals and 2.6 million acres of classifications had been reviewed.

As a result of these ongoing reviews, BLM has terminated or lifted 2.5 million acres of land classifications, replacing them with current land use plans.

BLM has also revoked a number of outdated withdrawals on lands immediately needed for other purposes, opening up lands for exchanges, transfers to other government agencies, mining, mineral leasing, and sale. On lands not immediately needed for other purposes, BLM is recommending that 2.2 million acres of withdrawals be continued and the balance, covering about 2 million acres, be revoked and opened to multiple use management, mining, and mineral leasing.

BLM's progress in carrying out the Congressional mandate was impacted during 1985 by a lawsuit filed by the National Wildlife Federation in August. The lawsuit, criticizing a number of BLM actions relating to the program, is still under consideration in Federal court.

ACQUISITIONS

BLM's acquisition program involves acquiring lands or interest in lands (such as easements) by gift, purchase, or exchange to improve the management of the public lands.

A large part of BLM's efforts are concentrated in the access area. BLM puts a high priority on obtaining easements over intervening private lands to permit uses such as mineral development, forest and range management, fire protection, and recreation. Without access, BLM's ability to manage, protect and develop public lands and resources is precluded or greatly restricted. Also, those lands without access are not available to the public.

During 1985 BLM acquired a number of important easements to benefit the public. Nine easements improved access across the Pacific Crest Trail at a cost of \$2 million appropriated from the Land and Water Conservation Fund. Another 25 easements were acquired for forestry, range, and other resource uses for \$215,000.

Through exchange or purchase, BLM also acquired 1,502 acres in the King Range Conservation Area, along the Bizz Johnson Trail, and along the Upper Sacramento River. These lands are valued at about \$1.4 million. In addition, almost 4,600 acres throughout the State were acquired through other exchanges. Finally, a parcel of land was acquired in Doyle, California for a BLM fire station.

BLM also continues to acquire easements for rangeland improvement as directed by the 1978 Public Rangelands Improvement Act. These easements enable the construction of fences, wells, and other water facilities for improving public rangeland conditions.

In the acquisition area, most of BLM's efforts are directed toward acquiring lands valuable for outdoor recreation and other public uses. Wherever possible, BLM tries to exchange other public lands for the critical private lands. The agency is also authorized to use money from the Land and Water Conservation Fund to acquire lands or easements for recreation purposes.

CULTURAL RESOURCES

The public lands in California contain remains of some 10,000 to 20,000 years of human history. These include prehistoric stone tools from the hemisphere's earliest inhabitants, abandoned military posts, mysterious aboriginal rock art, mining ghost towns, failed homesteads, still-visible ruts of early settlers' wagon trails, and scarcely noticeable scatters and deposits of other human occupants.

In its cultural resource management program, BLM identifies, records, evaluates, plans for, and makes professional judgments concerning the use of the cultural resources under its jurisdiction.

A highlight of BLM's 1985 cultural resource efforts was the identification and interpretation of the World War II Desert Training Camp commanded by the late General George S. Patton, Jr. BLM solicited and received the help from many veterans of this critical training ground in the California Desert and developed a plan for its permanent protection and interpretation for the public. Ceremonies dedicating a monument at Chiriaco Summit were held in May 1985, drawing hundreds of veterans and interested people.

Inventories of existing cultural resource data have been compiled for about five percent of BLM-administered public lands. So far, BLM has recorded 14,000 archeological and historic sites on these lands and estimates a full inventory would show around 150,000 sites on BLM-administered public lands.

Significant cultural sites are placed on the National Register of Historic Places. At the end of 1985, 35 BLM cultural sites were on the Register, and another 650 sites have been nominated or determined eligible for inclusion. An additional 1,500 sites are being considered as possibly suitable for nomination.

Through 1985, BLM evaluated and classified about 200 cultural sites according to one or more categories of use: socio-cultural use, current or potential scientific use, management use, and conservation for future uses. These classifications give field managers a sound basis for considering the importance of the properties when making multiple use decisions.

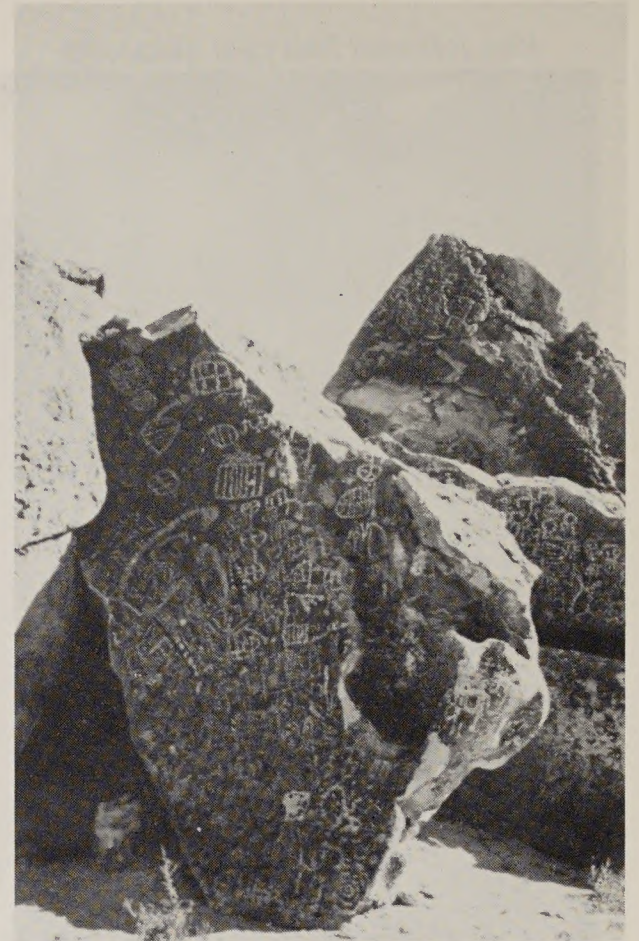
Nearly 500 fragile and threatened cultural sites were under BLM protection during 1985. Periodic patrols were carried out on almost 100,000 acres of public lands; other protection activities included posting signs, erecting fences, and stabilizing sites.

Another significant aspect of the BLM's cultural program is close coordination with Native American and other ethnic communities whose histories are tied to the public lands. Being responsive to the concerns of these groups is a high priority in California, since the State has the largest Native American population in the country.

CULTURAL RESOURCES

	1983	1984	1985
Inventory (thousands of acres)	40	50	33
Major Protection/Stabilization Projects	42	48	41
Permits	50	50	40

Petroglyphs (rock art) in Mono County



POLICY

Cultural resources include prehistoric and historic remains of past human activities, in the form of artifacts and areas where significant events occurred. BLM's policy for managing these fragile and non-renewable resources is based on the Federal Land Policy and Management Act of 1976 (FLPMA) and numerous other Federal laws and Executive Orders.

Under these directives, BLM manages the public lands to protect a wide variety of resources, including scientific, historic, and archeological values. BLM also inventories and evaluates cultural resources on the public lands and ensures that activities under Federal leases or permits do not damage or destroy cultural resources with national, State, or local significance.

BLM's policy is to ensure that cultural resources are given full consideration in all land-use planning and management decisions; to manage cultural resources so that scientific and sociocultural values are maintained and enhanced; to avoid inadvertent damage to cultural resources; to protect and preserve representative samples for the sake of scientific use and sociocultural benefits of present and future generations.

POLICY

The Bureau's policy for its wilderness program is based on Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) and the Wilderness Act of 1964. The principal guidelines of that policy are:

- The purpose of wilderness designation, as stated in the Wilderness Act, is to secure for the American people of present and future generations the benefits of an enduring resource of wilderness;
- BLM recognizes wilderness as a resource to be considered along with other resources within the framework of multiple use management of the public lands;
- Wilderness has value as a setting for primitive recreation or solitude and can provide a variety of other benefits to other resources and uses of significance to the American people;
- BLM has identified areas of public lands with wilderness characteristics (as identified by the Wilderness Act) and is conducting studies with extensive public involvement to determine each area's suitability or unsuitability for wilderness designation;
- Wilderness designation is not viewed as a form of temporary resource protection, therefore, only those areas which can be managed as wilderness over the long term will be recommended for designation;
- Public lands that have been found to have wilderness characteristics (called wilderness study areas) are managed so as not to impair their suitability for preservation as wilderness until Congress acts to include or not to include the areas in the National Wilderness Preservation System.

Once a wilderness area has been designated by Congress, BLM will effectively manage it to preserve its wilderness character and to provide for its future use and enjoyment as wilderness.

WILDERNESS REVIEW

The BLM continued to make substantial progress in 1985 toward completing wilderness studies on more than 6.9 million acres of public lands designated as Wilderness Study Areas (WSAs). Almost 6.3 million acres of these WSAs are in California and the remaining 600,000 acres are in Nevada.

These 225 separate units were selected for study from among the 18.6 million acres of public lands in California and Nevada because they possessed a number of basic wilderness characteristics: they are roadless, they are generally in a natural condition, and they offer outstanding opportunities for solitude or primitive recreation.

Intensive study of these WSAs has been underway since 1979. BLM evaluates these areas in detail to determine whether they are suitable for preservation as wilderness or more suitable for other, nonwilderness uses. Despite the tremendous acreages involved, BLM expects to have all these wilderness studies completed by the end of Fiscal Year 1987.

Those WSAs that are tentatively recommended suitable for wilderness designation are also surveyed for mineral values by the U.S. Geological Survey and the Bureau of Mines. In 1985, BLM released 18 of these mineral surveys for public comment. These studies involve 20 separate WSAs covering more than one million acres in Humboldt, Imperial, Inyo, Mendocino, Riverside, and San Bernardino Counties. Work continued during 1985 on the remaining surveys.

While these WSAs are being studied, BLM manages them so that their wilderness values are not impaired. During 1985, BLM intensified efforts to ensure these areas are protected while allowing certain activities, such as existing mining and grazing uses and certain valid existing rights, to continue as the 1976 Federal Land Policy and Management Act directs. BLM also allows certain other activities authorized by law to be conducted in WSAs, as long as the wilderness values can be protected.

In 1985 BLM initiated a formal public notification system for all proposed actions in WSAs to ensure interested parties have an opportunity to comment and make suggestions.

The end result of all these studies is to develop recommendations for Congress on each area's suitability or nonsuitability for wilderness designation. BLM's recommendations, along with the public's comments, are presented to the Secretary of the Interior. Congress set a deadline of 1991 for all these recommendations to be completed and forwarded to the President for his review. The President, in turn, submits his recommendations to Congress. Only Congress can designate areas as part of the National Wilderness Preservation System.

Once designated, the areas are managed to ensure long-term preservation of their wilderness values. By various acts of Congress, California BLM, by the end of 1985, was responsible for managing 13,000 acres of public lands within the National Wilderness Preservation System.

A draft management plan for one of these areas, the former Big Butte WSA, now part of the Yolla Bolly/Middle Eel Wilderness Area in Humboldt and Mendocino Counties, was worked on during 1985. A draft plan for public comment will be issued in 1986.

LIVESTOCK GRAZING

California BLM administers about nine million acres of public rangelands. During 1985, more than 1,000 permits were issued to some 900 livestock operators allowing them to graze their animals on these lands and to use 387,000 animal unit months of forage. Each unit is the amount necessary to feed one cow or five sheep for one month.

Over the past several years, BLM has been preparing comprehensive environmental impact statements to assess the impacts of various rangeland management options. These studies are now complete, allowing BLM to devote more attention to other management issues.

During the year, part of this emphasis was shifted to completing soil and vegetation inventories on some 50,000 acres of public rangelands. These inventories are conducted at varying intensities to guide management decisions and provide a basis for monitoring.

Monitoring studies were also given more attention in 1985 to determine if rangeland management goals are being met and to determine the need for and extent of changes from current management practices.

To guide management on high priority grazing allotments, BLM develops detailed allotment management plans (AMPs). BLM has completed more than 100 of these plans over the past four years, laying out the multiple use objectives for the area, prescribing management to meet those objectives, identifying needed range improvements, and detailing the monitoring studies that will be conducted to evaluate the plan's effectiveness. All AMPs are developed in close consultation with involved grazing operators and others interested in the management of particular allotments.

During 1985, BLM continued cooperative efforts with the Forest Service and livestock operators to carry out the Experimental Stewardship Program (ESP) authorized by the Public Rangelands Improvement Act of 1978. One of 16 national projects is on allotments surrounding the California/Nevada border in Modoc (CA) and Washoe (NV) counties.

The purpose of the ESP is to explore ways to improve the public rangelands by providing incentives for, or rewards to, livestock operators whose grazing management results in improved resource conditions.

BLM gave increased emphasis during 1985 to management of riparian areas (areas near water sources). These areas are important to a host of public land resources, including livestock, wildlife, and recreation. A draft policy was circulated for public review and a field task force was assembled to develop technical guidance. Riparian values are considered when developing all AMPs. Grazing systems developed must be compatible with protection of riparian resources.



Cattle grazing in Shasta County

POLICY

BLM's policy for managing domestic livestock grazing on the public rangelands traces its roots back to the Taylor Grazing Act of 1934.

Numerous more recent Executive Orders and laws, in particular the 1976 Federal Land Policy and Management Act (FLPMA) and the Public Rangelands Improvement Act of 1978 (PRIA), have modified and elaborated BLM's policy guidelines.

The Taylor Grazing Act gives BLM its basic authority to administer livestock grazing. FLPMA states domestic livestock grazing is one of the principal uses of the public lands and puts grazing into the wider context of managing public lands for multiple use and sustained yield.

PRIA reaffirms the principle of multiple use management based on comprehensive resource inventories and planning, and authorizes a program to improve the condition of the public rangelands. PRIA also established the policy of basing grazing fees on a formula reflecting annual changes in the cost of production.

BLM's basic policy for managing livestock grazing is to manage, maintain, and improve the condition of the public rangelands so they become productive for all rangeland values. There are a number of fundamental guidelines that BLM follows in implementing this policy.

BLM issues permits or leases for domestic livestock grazing on specific allotments of public lands, generally for 10-year periods. Once that period expires, the lessee or permittee is given first priority for receipt of a new lease as long as the lands remain available for grazing, the permittee or lessee has complied with BLM's rules, regulations and terms, and the permittee or lessee accepts the terms and conditions of the new lease or permit.

LIVESTOCK GRAZING MANAGEMENT

	1983	1984	1985
Acres Inventoried (thousands)	66.5	0	50
AMP's Implemented	45	27	23
Grazing Permits Issued	793	901	1,063
Allotments Monitored	161	175	178
Animal Unit Months Authorized (thousands)	342.6	332.9	386.7

RANGE IMPROVEMENT

BLM is committed to improving the condition of public rangelands to benefit wildlife, watershed, livestock, and other resources. Range improvement activities include prescribed fire, seeding, fence construction, weed control, water development, projects to enhance fish and wildlife habitat, and maintenance of existing improvements.

Decisions on the types of improvements needed are reached through the BLM land use planning process. Once a general framework is set, detailed allotment management plans, described on the opposite page, are prepared and implemented.

Congress annually appropriates funds from two sources to support the rangeland improvement effort. The range betterment fund, specifically earmarked for rangeland improvement work, consists of 50 percent of all public land grazing fees collected, or \$10 million annually, whichever is greater. The grazing administration funds appropriated annually by Congress may also be allocated for range improvements.

BLM currently directs range betterment funds toward implementing new on-the-ground improvements, while grazing administration funds are used for administration of the range improvement program, preparation of environmental and resource clearances, and other actions needed or required by law to support new improvements.

Maintenance of range improvements is paid for by BLM in some instances and the operator in other instances. Under a new policy initiated in 1982 and completed in 1984, livestock operators pay for all maintenance on structural range improvements where they are the prime beneficiaries. The statistics below reflect only BLM-maintained water and fence projects. Because much of the maintenance responsibility has been shifted to the operators, the number of BLM-maintained projects has decreased over the past several years. This policy enables funds previously being spent by BLM for maintenance to be used for new improvements.

In addition, BLM encourages private contributions toward rangeland improvements on public lands. Policy directives provide incentives for private contributions, including assigning a high priority to authorization of improvements funded with private contributions.

To determine how to manage and improve particular areas of the public rangelands, BLM divides the public rangelands into one of three categories: lands that need to be maintained in the current satisfactory condition (M Category); lands that need to be improved to correct a current unsatisfactory condition (I Category); or lands that need to be managed custodially to protect existing resource values (C Category).

It is BLM policy that new range improvement projects be ranked to determine funding priorities. Many factors, including the allotment management category, critical resource needs, and benefit/cost ratio, are used in this ranking process.

A new policy for maintaining range improvement projects was established in 1982. That policy states that the operator is responsible for maintaining projects within their allotments when they receive the majority of benefits from a project. This transfer of maintenance responsibility was completed by the end of 1984.

With the completion of environmental impact statements for all of the public rangelands, California's emphasis in rangeland management is shifting from comprehensive inventory and planning to site specific planning, implementation, and monitoring. BLM's monitoring plans will follow land use plan objectives and the findings of environmental impact statements.

Rangeland monitoring is coordinated with other resource management activities, and monitoring plans are developed to follow allotment categories, with I Category allotments (those needing and capable of improvement) having the highest priority for intensive monitoring.

RANGE IMPROVEMENT

	1983	1984	1985
Projects Developed			
Water Facilities	41	80	53
Miles of Fence	80	68	52
Management Facilities	8	23	19
Projects Maintained			
Water Facilities	51	44	8
Miles of Fence	131	17	3



*Range improvement
at Cima
Dome, East Mojave*

FORESTRY

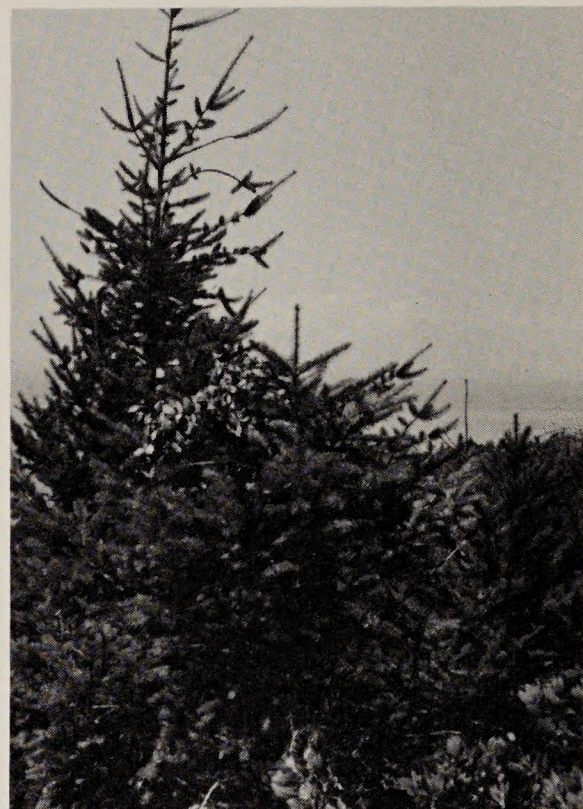
California has one of the most impressive forests of the world. Its forest lands have the world's tallest tree, the Coast Redwood; the world's most massive tree, the Giant Sequoia; the world's largest pine species, the magnificent sugar pine; the oldest tree in the world, the bristlecone pine; and the world's most extensively planted tree, the Monterey pine.

Of the 755,000 acres of forest land and woodland under BLM's jurisdiction in California, 216,000 acres meet the definition of "commercial" (with the potential to grow more than 20 cubic feet per acre annually.) Commercial trees in California include Douglas fir, white fir, red fir, incense cedar, ponderosa pine, sugar pine, lodgepole pine, Jeffrey pine, redwood, hemlock, western red cedar, and Port-Orford cedar.

Intensive management practices such as site preparation, reforestation, tree plantation protection, release and maintenance, and precommercial and commercial thinning are conducted annually to maintain productivity.

Although 1985 statistics show less timber sold than the previous year because of less demand, all other activities such as reforestation, land treatments, and thinning increased on the public lands in California.

In addition to the timber produced from public lands, other products from BLM's forests and woodlands include fuelwood, pinon nuts, floral greenery, decorative cones, fenceposts, poles, and Christmas trees.



FOREST MANAGEMENT

	1983	1984	1985
Timber Offered (million board feet)	15.4	26.6	21.9
Timber Sold (million board feet)	10.9	21.6	11.8
Acres Reforested	439	469	542
Land Treatment (acres)	401	371	479
Site Preparation (acres)	219	245	337
Release & Protection (acres)	182	126	142
Stand Improvement (acres)	1,711	775	1,070
Precommercial Thinning (acres)	245	140	148
Commercial Thinning (acres)	1,426	620	902
Stand Conversion (acres)	40	15	20



Timber cutting

POLICY

The Federal Land Policy and Management Act of 1976 (FLPMA) is the basis for BLM's forest land management policy. FLPMA requires public lands and resources to be managed under the principles of multiple use and sustained yield, balancing long-term productivity of the land and quality of the environment with recognition of the nation's need for timber.

BLM's forestry policy, issued in 1983, states that forest lands will be managed for timber production, as well as for other uses and values, to attain the widest range of beneficial uses; and that no single use will preclude other uses unless specified by Congress or justified in a formal finding as authorized and in the national interest.

Administrative set-asides that exclude forest lands from timber production are used by BLM only when mandated by Congress or when the set-aside is found to be the least restrictive means for protecting the public interest. Set-asides are limited to the smallest possible area and are made available for other compatible uses to the fullest extent practical.

POLICY

The 1976 Federal Land Policy and Management Act (FLPMA) directs BLM to manage the public lands to protect, among other things, the quality of scientific, scenic, ecological, environmental and other special values.

A major element of this special area management program is FLPMA's policy on Areas of Critical Environmental Concern (ACECs). ACECs are special areas within the public lands, requiring protective management over and above the general policies of resource protection followed by BLM.

Identification, designation and management of ACECs is an integral part of BLM's multiple use planning and management process. Other resource uses may be allowed in ACECs, as long as the special resources protected or human life and safety are not endangered.

In addition to the ACEC program, BLM also protects certain natural values by designating Research Natural Areas (RNAs) and Outstanding Natural Areas (ONAs), and participates in the program administered by the National Park Service to identify and designate National Natural Landmarks.

BLM's program to identify, designate and manage RNAs is designed to protect areas representing distinctive ecosystems. Access to RNAs is restricted to ensure they retain their educational and scientific values.

ONAs are areas of unusual natural characteristics where management of recreation activities is necessary to preserve those values. The management objective is to provide for the maximum amount of recreation use possible without damage to the area's natural features.

SPECIAL AREA MANAGEMENT

BLM highlights the special management needs of areas with unique or unusual ecological, scientific, cultural, scenic, or other values through a number of special designations.

Currently, there are about 150 such special areas spread across 1.9 million acres of public lands in California. They include a number of special designations, such as Area of Critical Environmental Concern, Outstanding Natural Area, Research Natural Area, National Scenic Area, Wild and Scenic River, and National Natural Landmark. Most of these designations are made through the BLM's land use planning system and some are made by Congress. The Man in the Biosphere Reserve is an international designation made by the United Nations.

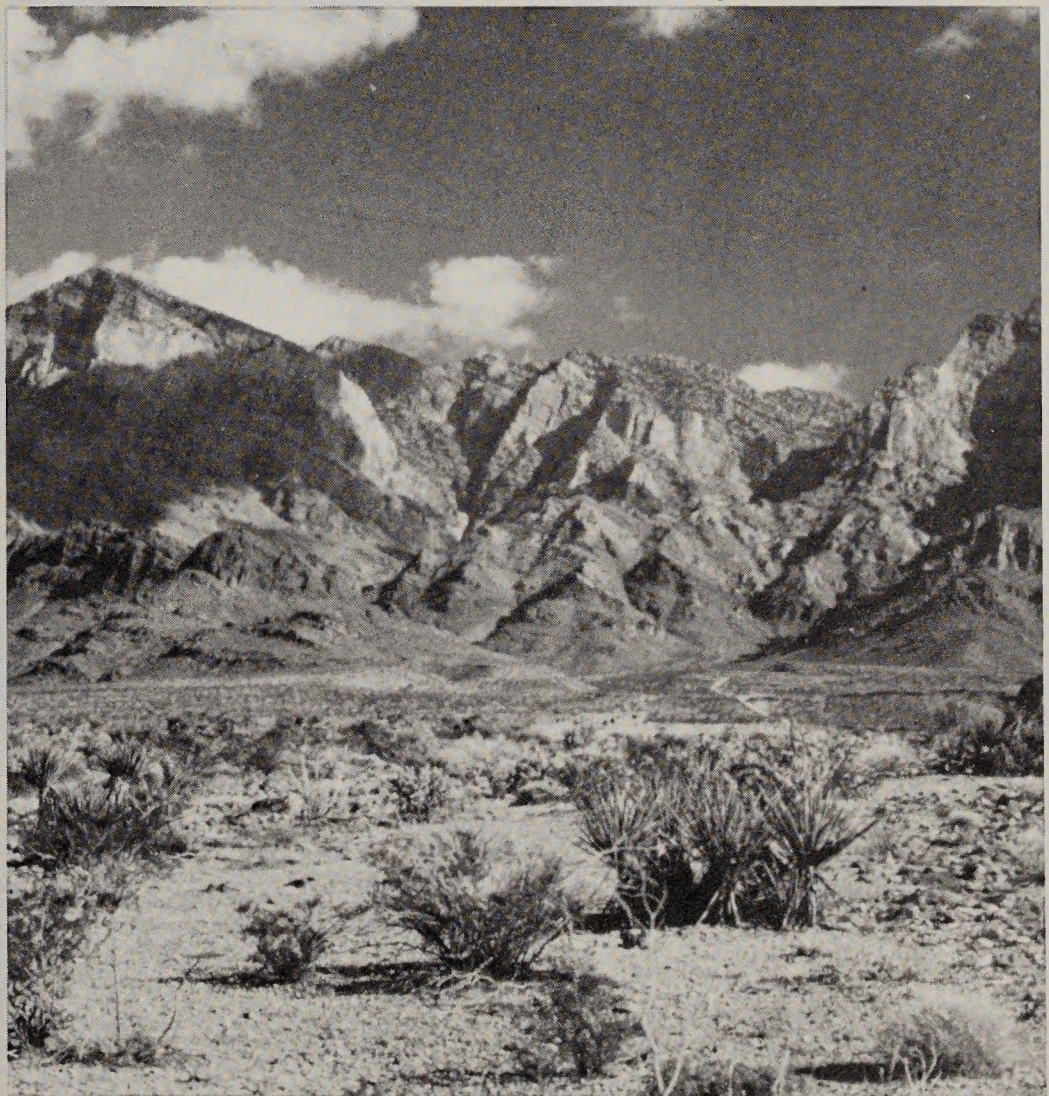
California BLM is responsible for one of the two Man in the Biosphere Reserves in the United States: the North Coast Range Preserve in Humboldt County. It also manages one of two National Scenic Areas in the country: the East Mojave National Scenic Area in San Bernardino County. California BLM also has designated more Areas of Critical Environmental Concern than any other BLM State, with 92 areas designated through the end of Fiscal Year 1985, covering more than 750,000 acres.

By the end of 1985, BLM also had 18 Outstanding Natural Areas; 14 Research Natural Areas; and 10 National Natural Landmarks.

This high percentage of designations reflects the unusual diversity and special values on the public lands in California. By designating these areas, BLM highlights the special values present and sets a framework for management prescriptions for the area. These values are given high priority in the multiple use management of the public land area involved.

New designations made in 1985 included 10 Areas of Critical Environmental Concern covering 36,655 acres and 6 Research Natural Areas covering 26,577 acres.

Providence Mountain, East Mojave



WILDLIFE HABITAT

Wildlife habitat and species on public lands administered by the California BLM are more diverse than in any other western State. There are 23 major vegetation groups that support an estimated 800 different wildlife species, including 18 classified as threatened or endangered (four plants and 14 animals).

These resources are important for their recreational, scientific, educational, social, economic, cultural, and esthetic values. BLM's responsibility is to maintain or improve habitat for these species, working in conjunction with State wildlife agencies that are responsible for wildlife population management.

As an example of this positive cooperative effort, BLM received more than \$185,000 during 1985 in contributed funds from the State's special environmental license plate fund. This money will be used for habitat improvement work.

The importance of riparian area management (areas near water sources) was highlighted by BLM during 1985 with issuance of a draft national policy. The importance of these areas to wildlife and other resources was a key element of the policy. Public comments received are now being analyzed and a final policy should be issued during 1986.

Another 1985 highlight was a research program to improve bighorn sheep habitat. BLM was allocated \$294,000 from Congress to be used as a "challenge grant" to encourage private and other agency contributions. This money was matched by a number of organizations, including the Bighorn Research Institute of California, which raised additional funds to initiate the needed research project, and received \$72,600 from BLM.

Last year, BLM in California spent \$600,000 in Federal funds on threatened and endangered species habitat management to aid in the recovery of species such as the Mojave chub, Owen's pupfish, Coachella Valley fringe-toed lizard, San Joaquin kit fox, peregrine falcon, bald eagle, California condor, McDonald's rockcress, and several plant species.

WILDLIFE HABITAT MANAGEMENT

	1983	1984	1985
Acres Inventoried	221,467	204,343	337,000
Miles of Stream Inventoried	14	10	0
New HMPs Prepared and Revised	52	54	23
Acres of Wildlife Habitat			
Improved	92,165	170,824	90,390
Miles of Stream Habitat Improved	2	2	82
Acres of Wildlife Habitat			
Maintained	37,760	51,051	108,556
Miles of Stream Habitat			
Maintained	12	8	12
Terrestrial Plans Monitored	NA*	NA	97
Aquatic Habitat Plans Monitored	NA	NA	27

*Not available due to statistical reporting changes.



Peregrine falcon nest



POLICY

BLM's policy on managing wildlife resources and protecting threatened and endangered species, issued in October 1983, is based on the Federal Land Policy and Management Act of 1976 (FLPMA), and numerous other Federal laws and Executive Orders that are concerned with fish and wildlife resources such as the Sikes Act, Endangered Species Act, etc.

FLPMA states that providing food and habitat for fish and wildlife is a major use of the public lands and specifies Bureau responsibilities to protect ecological and environmental resources. In addition, BLM's new policy recognizes that as fish and wildlife habitats are lost or damaged due to population growth and development, the varied habitats of the public lands become increasingly important.

BLM recognizes the State's responsibilities for managing native species and understands that State-Federal partnership is essential to wildlife habitat management programs.

BLM initiates active cooperation with State, local, and other Federal agencies in all facets of its wildlife program.

Cooperative management agreements with wildlife management agencies and organizations, other conservation interests, and public service groups actively encouraged.

Inventory, monitoring, and resource efforts focus on areas where wildlife values, concerns or opportunities are high, and where there is public interest or controversy.

Recommendations for wildlife habitat management are based on analysis of ecological conditions, legal mandates, Federal goals for migratory species and Federally listed threatened or endangered species, State goals for resident wildlife populations, economic values, and the concerns of the public.

BLM ensures that all habitat improvement plans are the most cost-effective means to achieve stated objectives for managing fish and wildlife habitat.

POLICY

BLM's policy for managing wild horses and burros is based on the Wild Free-Roaming Horse and Burro Act of 1971, as amended by the 1976 Federal Land Policy and Management Act (FLPMA), and the Public Rangelands Improvement Act.

BLM's policy, as directed by Congress, is that wild horses and burros are considered an integral part of the natural system of the public lands. In areas where they existed in 1971, BLM is required to protect wild horses and burros and to manage them in a manner to achieve and maintain a thriving natural ecological balance. Ideally, wild horse herds will be in equilibrium with their habitat, other wildlife species, and the other resource values managed under the principles of multiple use.

There are three main policy guidelines for managing wild horses and burros on the public lands. First, an inventory of wild horses and burros is to be maintained to determine what the appropriate management level or population of wild horses and burros should be on specified areas of public lands, whether and where overpopulation exists, whether action should be taken to remove or destroy excess animals, and whether appropriate management levels can be achieved by other options such as sterilization or natural controls.

Second, if it is determined that an overpopulation exists and it is necessary to remove excess animals to protect rangelands from deterioration, the excess animals are to be removed in the following order:

- Old, sick, or lame animals are to be destroyed in the most humane manner possible.
- As many animals as can be humanely cared for and for which an adoption demand exists are to be humanely captured and removed from the range for private care through the BLM's Adopt-A-Horse and Burro Program.
- Excess animals for which no adoption demand exists are to be destroyed in the most humane and cost-efficient manner possible. Though this last provision is allowed by law, in practice only old, sick or lame excess animals are being destroyed.

WILD HORSES AND BURROS

As directed by Congress, BLM is responsible for protecting, managing, and controlling the wild horses and burros that roam many areas of the public lands. Since passage of the Wild, Free-Roaming Horse and Burro Act in 1971, a great deal of BLM's efforts have been directed at bringing herd numbers down to manageable levels.

Over the past several years, BLM has made great progress in reaching that goal. The current population of wild horses is 2,600 with a management goal of 1,700 animals; for wild burros the current population is 2,800, with 1,000 as the management target.

Last year the BLM's removal program of these excess animals was highly successful, with 697 horses and 381 burros removed. In California, a total of 10,400 excess animals have been removed since 1976, protecting the range from overuse and helping to foster healthy herds.

BLM has also taken the lead in helping to control populations on other Federal lands. In 1985, 2,194 burros were removed from the Death Valley National Monument to protect its natural ecosystems. Management levels have been reached at the China Lake Naval Weapons Center and on Forest Service lands with removal of about 300 burros and 60 horses last year. Since 1979, 10,275 animals have been removed, under cooperative agreement, from other Federal lands.

Humane care and treatment of these animals once they are rounded up is a high priority with BLM. Last year, BLM placed 1,070 animals through its highly successful Adopt-a-Horse and Burro program. The use of "satellite" adoptions, or taking animals into towns throughout the State for adoption, was extremely helpful in the rapid placement of animals. About 600 animals were shipped to BLM adoption facilities in the East to meet demand.

Now that BLM is nearing its management levels, it is devoting more effort to developing and implementing herd management plans. Thirteen such plans were developed in 1985, more than three times the number of plans developed during the previous year.

WILD HORSE & BURRO MANAGEMENT

	1983	1984	1985
Number of Animals Adopted	833	764	1,070
Number of Herd Management Area Plans Developed	0	4	13
Number of Excess Animals Removed from Public Lands	1,127	1,322	1,094
Number of Excess Animals Removed from NPS, Military, & FS Lands	1,715	2,270	2,550
Number of Titles Issued	447	250	345

Third, animals are to be adopted only by qualified individuals who BLM has determined can provide humane treatment and care. After appropriate care has been provided for one year, an individual may obtain title to as many as four animals per year. More than four animals may be adopted in certain cases.

In California, BLM manages and maintains thriving healthy wild horse populations in established herd management areas, according to management plans. Selective gathering may be used to improve or maintain herd condition, and high quality, unrelated wild stock may be returned to herds to reduce inbreeding and to perpetuate healthy animals.

RECREATION

Recreation is a major use of BLM public lands in California, drawing more than 28 million recreation visits in Fiscal Year 1985. This use constitutes more than half of the total visits to all BLM public lands nationwide during the year.

Camping and off-road vehicle travel were the major activities, comprising 57 percent of the use, with hiking, hunting, boating and fishing also important reasons for visiting California's public lands.

Assisting these visitors and ensuring their safety are a high priority with BLM. Consequently, the amount of time spent on visitor assistance patrols more than doubled in 1985, from 1,560 units of patrol in 1984 to 2,798 units in 1985.

The primary objective of the BLM's recreation program is to provide a generally unstructured and unregimented type of recreation for the public land visitor. Consequently, the California recreation experience on BLM lands ranges from the primitive where access is limited with few or no facilities, to the more developed experiences with easy access and developed user facilities.

This broad range of opportunities makes BLM's recreation program extremely diverse. The agency is responsible for the management of two National Conservation Areas with unparalleled recreation opportunities: the King Range on California's north coast and the huge California Desert. About 140 miles of the Pacific Crest Trail crosses public lands in California, and portions of five National Wild and Scenic Rivers, the north fork of the American, the Klamath, the Trinity, the Eel and the Tuolumne, are BLM's responsibility.

To accommodate visitors from northern States in their trailers and campers seeking warmer climates, BLM established eight long-term visitor areas along the Colorado River. These "Snowbirds" can use these areas for a low \$25 fee, and can camp from October 1 to May 31 each year.

Cooperation is an important part of BLM's recreation program. An example is development of recreational vehicle opportunities on public lands through funds derived from State-levied user fees and gas taxes. BLM and the State of California have jointly approved 35 separate projects, valued at \$8 million through 1985.

Agreements with other government agencies, groups, and individuals are also sought to jointly manage high use recreation areas. Some 36 significant agreements were in effect in 1985. Examples include an agreement with the National Outdoor Coalition to cooperatively manage Dumont Dunes for recreation and wildlife uses, and a project underway with the California Association of Four-Wheel Drive Clubs to manage the historic Mojave Road. Other agreements involve constructing trails, patrolling off-highway vehicle use areas, maintaining campgrounds, and operating visitor use centers.

POLICY

The Federal Land Policy and Management Act recognizes outdoor recreation as one of the principal uses of public lands.

Under BLM's policy, there are two primary types of recreation management: Intensive/Special Recreation Management and Extensive Recreation Management of dispersed recreational activities.

Intensive or special recreation management is provided in areas where recreation is the principal management objective. For these areas, comprising a small proportion of the public lands, BLM conducts detailed planning for recreation visitors and protection of recreation resources.

Higher priority for intensive or special management is given to areas designated by Congress (such as Wild and Scenic Rivers or National Recreation Areas); to major rivers or water-based recreation areas; to areas having outstanding resource values where demand cannot be satisfied by private sources or other government agencies; and to areas where recreational capacity is exceeded regularly and significant resource values are threatened.

Management of extensive or dispersed recreational activities is provided in areas where recreation is not the principal management objective but is significant in the overall multiple use management framework of an area. Minimal supervision and minimal facilities are provided.

To avoid duplicating services or facilities and to increase efficiency, BLM transfers management responsibility or enters into joint management agreements with other government entities when practical and appropriate.

Site use fees are set at fair market value. Special recreation permit fees are set to cover both use of the land and permit processing costs. Private concessions are offered on developed sites where use is sufficient to generate a reasonable profit.

RECREATION

	1983	1984	1985
Number of Recreation Visits (millions)	28.3	28.2	28.5
Visitor Assistance (units of patrol)	1,490	1,560	2,798
Special Recreation Permits Issued	354	456	408
Receipts from Permits	\$81,000	\$104,000	\$110,000

POLICY

Soil, water and air are basic necessities on which other resources, such as forests, rangelands, and wildlife depend. Consequently, BLM's management actions affecting the soil, water, and air resources of the public lands are taken primarily to support the various renewable resource programs.

Programs for managing soil, water, and air are based on a combination of mandates, including the Clean Water Act, the Clear Air Act, the Federal Land Policy and Management Act, and other laws, Executive Orders and regulations pertaining to the renewable resource programs that are affected by the quality of the soil, water, and air.

Therefore, BLM's policies for the soil, water, and air programs reflect national objectives as well as state and local program needs.

BLM's general soil policy guidelines are to protect soils by preventing or reducing wind and water erosion, and to avoid or curtail developments in critical soil areas and on fragile soil types. The policy is designed to prevent deterioration of the soil resource and to contribute to improved water quality by minimizing sedimentation. Soil analyses and inventories are used in BLM's land use planning and decision making process for implementing a variety of management actions. BLM gathers inventory data by using on-the-ground transects or sampling in conjunction with aerial photo interpretation.

BLM's general water policy guidelines are to protect and enhance the quality, quantity, and use of waters on the public lands. A critical part of this program is the complicated area of water rights. BLM's policy is to identify and quantify claims to water on public lands, to record reserved water rights through notification to the states, and to obtain nonreserved rights by appropriation according to the state's administrative procedures.

BLM has a general responsibility to protect and enhance the air quality of the public lands. In dealing with air quality, the Bureau works closely with the States to ensure that BLM management activities either meet State air quality standards or, if necessary, are allowed to exceed them by permit.

SOIL, WATER, AND AIR

Protection and management of the soil, water, and air resources of the public lands are basic responsibilities of BLM and are central to both the short and long-term objectives of BLM programs.

BLM carries out these responsibilities by conducting soil and water inventories, monitoring water quality and quantity, implementing erosion control and watershed practices, and monitoring climate, meteorological, and air quality data.

Soil and watershed inventory data provide much of the resource information needed for multiple-use planning and preparation of environmental impact statements and assessments.

In the past fiscal year, 50,000 acres of California soils were inventoried. These inventories help determine soil and vegetative relationships, which are used to develop guidelines for rangeland management. This information also contributes to the successful operation of other BLM programs, such as energy development and recreation use.

Climate, meteorology, and air quality data are used to help plan for a number of activities, including prescribed burning, rangeland management, energy and mineral leasing, and other resource programs.

More than 600 water sources were also inventoried during the year. The BLM uses this information to comply with State law in identifying water uses and needs for management of the public lands. Water rights, authorized by State law, were acquired by BLM during 1985 for 40 proposed grazing water developments.

Watershed monitoring was conducted on 419 different sites to measure water yield, quality, or erosion. This monitoring effort provides critical information to evaluate present management efforts and helps in making future decisions.

In 1985 several watershed activity plans were developed to provide guidance for constructing watershed improvements over the next several years. Using already completed plans, 26 watershed improvement projects, including prescribed burns, stream channel improvements, erosion control, and culvert placements, were completed during the year.

SOIL, WATER & AIR MANAGEMENT

	1983	1984	1985
Acres Inventoried for Soil Surveys (thousands)	83	128	50
Water Sources Inventoried	400	978	669
Watershed Improvements	NA*	NA	26
Watershed Monitoring Sites	NA	217	419

*Not available due to statistical reporting changes.

Volunteers help with erosion control



HAZARDOUS MATERIALS

The BLM, along with other land management agencies and the public, has become increasingly concerned with how to safely manage and control hazardous materials that are illegally or legally dumped on the public lands.

In 1983, BLM began an active program of hazardous waste management to protect the public and comply with a number of laws, particularly the Comprehensive Environmental Response, Compensation, and Liability Act, that set up the national Superfund to help pay for cleanup of certain sites.

BLM works closely with the Environmental Protection Agency which oversees the Superfund effort. Another close cooperater is the State of California, with a number of agencies and laws involved. Local governments also play a critical role.

Working together, along with private companies and landowners, progress is being made on identifying sites and initiating plans to solve the problems.

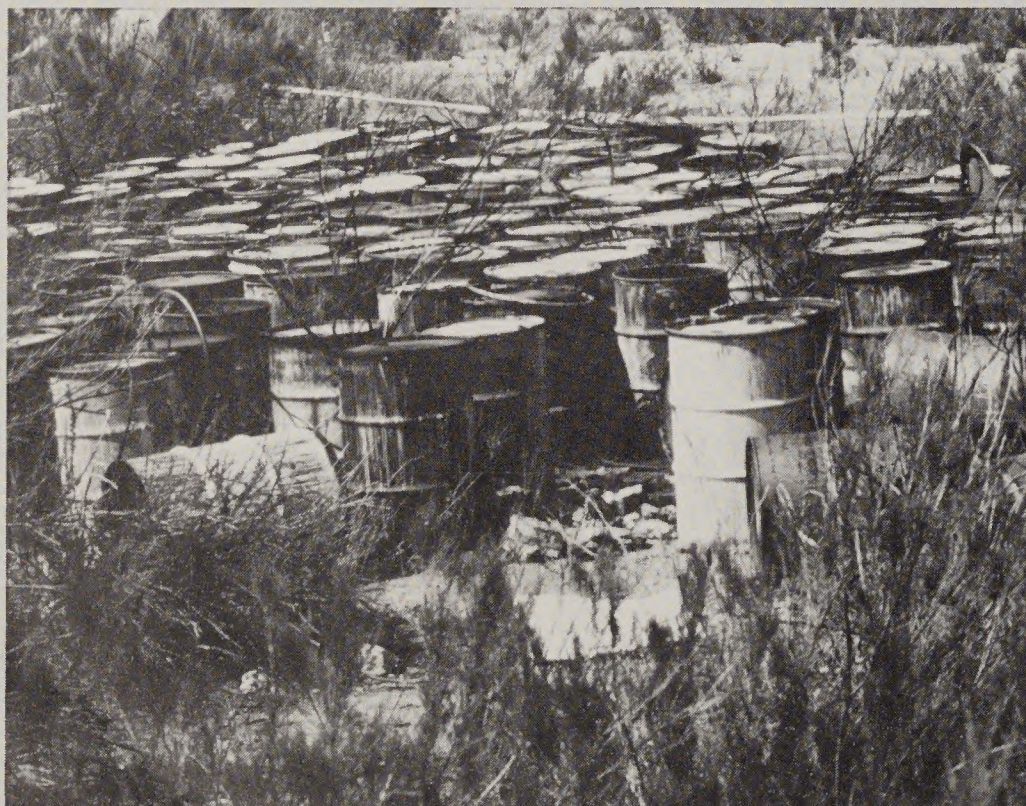
By the end of 1985, BLM had identified 30 sites on public lands demanding attention, including one site currently listed on EPA's Superfund list, and another on the State's Superfund list.

HAZARDOUS MATERIALS

HAZARDOUS MATERIAL SITES IDENTIFIED

	1983	1984	1985
Midnight Dumpings*	2	6	12
Oil Spills	0	17	14
Mining Related Waste	2	3	2
Superfund Sites			
Federal	0	1	1
State	0	1	1

*Midnight dumpings are illegal, random dumpings of hazardous materials on public lands.



Illegal dumping of hazardous wastes

POLICY

Three major Federal laws guide the hazardous materials program:

- The Comprehensive Environmental Response Compensation and Liability Act states that every Federal agency is responsible under the Act in the same manner as an individual, including legal liability. If a significant quantity of hazardous materials is released causing an imminent threat to public health and safety, the Environmental Protection Agency is authorized to clean it up using Superfund money and require reimbursement. The law also establishes a National Priority List of hazardous waste sites.
- The Resource Conservation and Recovery Act regulates the disposal of both solid and hazardous wastes and establishes criminal liabilities.
- The Clean Water Act establishes a national contingency plan to respond to oil and hazardous materials spills into water.
- In addition, the State of California leads the nation in passage of laws dealing with hazardous materials issues. The State Department of Health Services regulates many aspects of the program and implements the California Superfund legislation passed in 1983. The other State agency implementing the majority of these laws is the State Water Resources Control Board and its Regional Water Quality Control Boards. County governments also play a major role in protecting the public health and safety.

SUPPORT SERVICES

POLICY

The BLM's objective for the fire management program is to protect and enhance public land resources by reducing the potential for wildfires that threaten both human and resource values, and by using prescribed or planned fire to meet resource and management objectives. The basic authorities for these actions are in the Protection Act of 1922, the Taylor Grazing Act of 1934, the Oregon and California Grant Lands Act of 1937, the Reciprocal Fire Protection Act of 1955, the Economy Act of 1932, and the Federal Land Policy and Management Act of 1976.

The suppression of wildfire, caused either by lightning or by people, is a high priority to BLM. An equally high priority is the safety and protection of the firefighters who battle these blazes.

Aggressive action is taken on all fires on or threatening the public lands to minimize resource losses, suppression costs, rehabilitation costs and environmental damage. However, in areas where controlling fires is extremely difficult or where the values threatened do not warrant the expense, BLM uses plans, prepared in advance, to limit suppression activities.

Areas burned by wildfire are evaluated to determine rehabilitation needs to prevent soil erosion.

For programs that plan to use prescribed fire as a management tool, a prescribed fire plan is prepared and approved in advance.

The protection of BLM buildings and equipment is normally done by local firefighting organizations due to the fact that BLM fire suppression forces are manned, equipped and trained to fight wildland fires. BLM assistance in suppressing fires in developed areas occurs in emergencies to save lives or to retard the spread of the fire to adjacent wildlands. Only trained and qualified Bureau personnel are assigned to fire management activities.

FIRE MANAGEMENT

The 1985 fire season was one of the worst on record, not necessarily because of the number of public land acres burned but because most of the fire activity was concentrated into a short time period, mainly in early July.

With so many large fires, both on BLM-administered lands and other private and public lands, manpower and material resources were fully committed and reserves stretched to the limit. Using high technology, such as BLM's lightning detection system, and pooling resources, BLM and other firefighting agencies were able to control the blazes and protect lives, property, and resources.

BLM's fire management program is three-fold: protecting property and natural resource values; rehabilitating areas damaged by wildfire; and ensuring that prescribed or planned burning, designed to accomplish a variety of resource management objectives, is safely conducted and controlled.

With firefighting responsibilities on more than 18 million acres, BLM depends heavily on cooperative agreements for fire suppression with other agencies, including the California Department of Forestry, National Park Service, U.S. Fish and Wildlife Service, Bureau of Indian Affairs, and Forest Service.

As soon as possible after the fires are extinguished, BLM develops rehabilitation plans for areas that are not able to regenerate naturally or where erosion is a problem. In 1985, BLM committed \$375,000 to this effort, using the funds to reseed, build fences, post signs, and implement other projects on some 17,700 acres of public lands.

Finally, BLM sometimes initiates fires on public lands under carefully controlled conditions. Such prescribed burning is an effective tool to improve rangeland resources and to prevent disaster fires.

FIRE MANAGEMENT

	1983	1984	1985
Fire Management Plans (number)	4	6	3
Prescribed Burns (number)	40	50	36
Number of Fires	251	322	250
Acres Burned	21,793	70,373	70,500

A prescribed burn on public lands



LAW ENFORCEMENT

Law enforcement on the public lands in California has been, and continues to be, a model for the BLM nationwide. Much of the program's policy and guidance originated in California, where the program has developed into a cooperative effort. With more than 18 million acres to oversee, California BLM relies on law enforcement agreements with State and local agencies, and on its own highly trained special agents and rangers to carry out its law enforcement responsibilities.

Law enforcement agreements with State and local police agencies are an important element. During 1985, nine of these agreements were in effect, and \$55,500 was paid by BLM to these agencies to help with expenses. Counties may also use funds paid by BLM through the Payments in Lieu of Taxes program for law enforcement purposes.

BLM's special agents or criminal investigators handle major violations of the public land laws. These agents are highly trained and are responsible for coordinating with State and local law enforcement officials, assisting with unauthorized use cases, and training BLM personnel in how to report violations, deal with hostile situations, and protect their own safety.

BLM rangers, or uniformed enforcement personnel, patrol the public lands and work with visitors to ensure resource protection and prevent violations. Currently, these rangers are assigned to the California Desert Conservation Area.

Because of the danger to public safety, BLM continued to place a high emphasis in 1985 on eradication of illegal marijuana planting on the public lands. These efforts are directed through California's Campaign Against Marijuana Planting (CAMP) program, a highly successful cooperative effort consisting of law enforcement personnel from BLM, Forest Service, National Park Service, Bureau of Narcotics Enforcement, Drug Enforcement Administration, U.S. Customs, and 37 California counties.

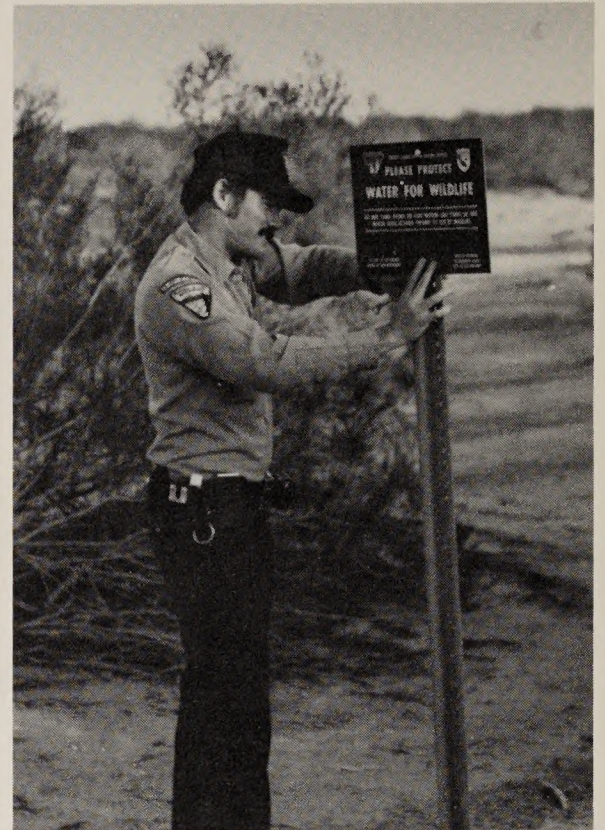
During 1985, CAMP seized 166,000 plants or 817,000 pounds of marijuana from Federal lands in California. About 40,285 plants, or 130,580 pounds of that marijuana came from 150 sites on the public lands. A focus of the year's efforts was the Delta 9 operation, a massive nationwide thrust conducted from July through September to help rid the public's lands of this illegal and dangerous activity.

BLM's other law enforcement efforts are diverse. About 85 percent of the agency's law enforcement work involves crimes against property and unauthorized use, including timber theft, wild horse killing and theft, removal and theft of cactus and other desert plants, mineral theft, range arson, destruction of recreation sites, removal or defacement of antiquities, public land survey marker destruction, and occupancy trespass.



Marijuana being confiscated by Campaign Against Marijuana Planting near Ukiah

BLM Desert ranger



POLICY

The public lands administered by BLM contain valuable resources which BLM is mandated to protect. The agency's authority for resource protection is based on Section 303(a) of the Federal Land Policy and Management Act of 1976 (FLPMA). The Secretary of the Interior is directed to "issue regulations necessary to implement the provisions of this act with respect to the management, use, and protection of the public lands, including the property located thereon."

The act authorizes BLM to enter into contracts with local officials to enforce Federal laws. It also authorizes Federal personnel (special agents) to carry out enforcement responsibilities and authorized the establishment of a uniformed Desert Ranger Force in California. The act provided a penalty and/or fine for violations of the established rules and regulations.

The BLM also relies on other Federal statutes, rules, and regulations for protecting specific resources such as the Wild, Free-Roaming Horse and Burro Act, the Archeological Resources Protection Act, the Taylor Grazing Act, the Land and Water Conservation Act, and a variety of other Federal statutes related to the theft, vandalism, and/or destruction of resources.

Violations occurring under any of these Federal acts are referred to the United States Attorney's Office for prosecution.



Cadastral surveyors

POLICY

The BLM is the legal land surveying agency for the United States Government. Through its cadastral survey program, the BLM is responsible for establishing, reestablishing, and maintaining the Public Land Survey System (PLSS), including the legal records, the preparation and maintenance of maps and diagrams, and the administration of mineral surveys conducted on the public lands.

Cadastral surveys are based on the Ordinance of 1785 and the basic survey authority derived from the Act of May 18, 1896. (This act provided for the appointment of a Surveyor General.) Beginning in 1851, Manuals and Surveying Instructions have been periodically issued, with the latest in 1973. These manuals describe how cadastral surveys of the public lands are made in conformance to statutory law and judicial interpretation.

The BLM's Cadastral Survey Program is responsible for developing and maintaining the standards and procedures of the Bureau's cartography function, and providing the cartographic products needed to support all BLM land and resource management programs. These products involve base mapping, aerial photography, orthophotoquads, photogrammetry, and thematic mapping.

ENGINEERING

BLM's engineering program involves construction, maintenance, dam safety inspection, posting signs, range improvements, and water testing, as well as mitigating public safety hazards, such as old mine shafts.

All these activities are in direct support of administrative and resource program goals. The construction program includes building roads, trails, buildings, and recreation facilities. Roads are generally in support of timber sales; trails are in support of the recreation program or special Congressional initiatives, such as the Pacific Crest Trail; buildings such as fire stations are constructed; and recreation facilities are built to support visitor use management.

During 1985, engineering emphasis was directed toward the following projects: road maintenance and barrier construction for the Clear Creek off-highway vehicle (OHV) area near King City; design of the Buttercup Valley road between El Centro, California and Yuma, Arizona for OHV use; monitoring compliance of the All American/Celeron pipeline construction; construction of the Knoxville OHV area near Lake Berryessa; completion of bridge safety inspections; fence construction; and reservoir maintenance.

BLM places a high priority on maintenance of existing facilities including road networks, trails, and recreation sites. The majority of BLM's road system is single lane dirt roads serving timber sales, miners, and ranchers. The Bureau's trail system is heavily used by hikers and recreation sites range from day-use fishing access to fully developed facilities with water, restrooms, and individual family units.

CADASTRAL SURVEY

The year 1985 marked the 200th Anniversary of a law passed by Congress called the Ordinance of 1785 that set up the Nation's cadastral survey system. This legislation was the foundation for the growth of the United States and the cadastral survey program, which still plays a vital role in public land management.

Cadastral surveys create, mark, and define the legal boundaries of public lands by establishing monuments or corner markers on the ground and recording their location on field notes and plats or maps.

These surveys are the basis for all land titles or patents and other documents used to transfer public lands out of Federal ownership and to administer and manage the lands retained in Federal ownership.

Last year, BLM completed 13,324 acres of original surveys and 212,884 acres of resurveys on Federal lands in California. This amounted to 2,026 miles of surveys.

To commemorate the 200th Anniversary, BLM cooperated with the Surveyors Historical Society to develop an exhibit for the public that was displayed in the State Capitol. The exhibit, also used at other public facilities throughout the State, traces the history of land surveying and includes a number of artifacts, such as the original Federal land grant document signed by President Thomas Jefferson and Secretary of State James Madison.

By the end of 1985, BLM had surveyed roughly 91 million or 90 percent of California's 101 million acres. New survey technology continues to be tested and applied to increase the productivity and cost effectiveness of cadastral surveys.

GENERAL ADMINISTRATION

Like any other large organization, BLM must have effective administrative support. These critical activities include personnel management, employee and visitor safety, budget preparation, management research and evaluation, and workload tracking systems, as well as administrative services such as building space, telephones, equipment, and vehicles.

During 1985, major emphasis was given to improving BLM's telecommunications network. New telephone systems were installed in several locations and progress was made on hooking up all BLM offices to a sophisticated computer telecommunications system to improve transfer of information.

DATA MANAGEMENT

BLM continues to expand its capability for gathering, storing, processing, and retrieving resource and other pertinent information. This program includes remote sensing, micrographics, telecommunications, and automated data processing.

A number of computer systems are now on line, while others are being developed. California BLM has pioneered a system that will soon be available for public use. Called On-Line Recordation and Case Access System or ORCA, the system will allow the public to access BLM files to find out up-to-date information on oil and gas and geothermal leases, rights-of-way cases, and other public land actions.

BLM is also entering data into a massive system called the Automated Land and Mineral Record System or ALMRS. This system, still several years from full implementation, will integrate a vast amount of public land information for easy access, rapid processing, a high level of accuracy, and consistency. ALMRS will benefit the public by enabling BLM to streamline its operations, process permits and applications faster, and reduce the cost of records management.

VOLUNTEERS

The lands administered by BLM belong to the public and California BLM is fortunate that many Californians take pride in their lands and volunteer their time and talent to help manage them.

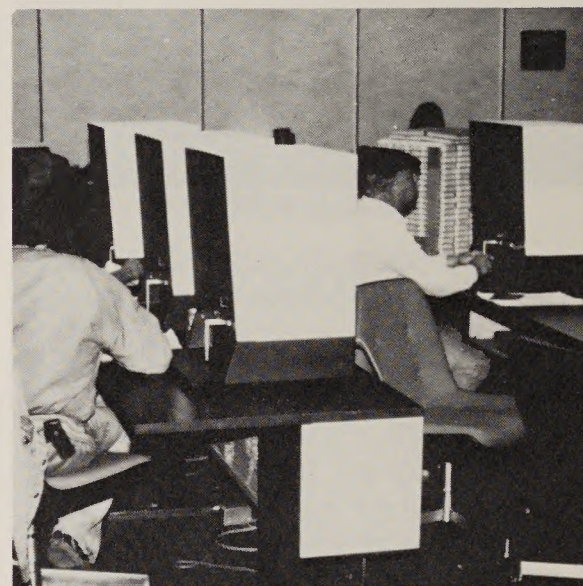
During 1985, the amount of time contributed by volunteers to help improve the public lands increased by more than a third, from 62,438 hours to 85,314 hours. The 829 volunteers came from local community service groups, youth organizations, and outdoor interest groups, as well as individual citizens with a desire to help.

Their efforts were also diverse and included developing and maintaining trails; hosting at campgrounds; protecting or restoring archeological sites; assisting with mineral assessments; surveying land; helping with planning, public affairs and administrative duties; cleaning up trash; and improving recreation areas.

VOLUNTEERS

	1985
Number of Volunteers	829
Hours of Service	85,314
Value of Volunteer Work	\$849,434
BLM Costs to Manage Program	\$ 43,315

BLM office in Needles



Public views BLM records

Volunteers clearing trail



U.S. Department of the Interior Bureau of Land Management

California State Office
2800 Cottage Way, Room E-2841
Sacramento, California 95825

916/ 978-4754

California District/Resource Area Offices

Ukiah District

555 Leslie Street
Ukiah, California 95482
707/ 462-3873

Clearlake Resource Area

555 Leslie Street
Ukiah, California 95482
707/ 462-3873

Arcata Resource Area

P.O. Box 11
1585 J Street
Arcata, California 95521
707/ 822-7648

Redding Resource Area

355 Hemsted Drive
Redding, California 96001
916/ 246-5325

Susanville District

P.O. Box 1090
705 Hall Street
Susanville, California 96130
916/ 257-5381

Alturas Resource Area

P.O. Box 771, Centerville Road
Alturas, California 96101
916/ 233-4666

Surprise Resource Area

P.O. Box 460
602 Cressler Street
Cedarville, California 95104
916/ 279-6101

Eagle Lake Resource Area

P.O. Box 1090
2545 Riverside Drive
Susanville, California 96130
916/ 257-5381

Bakersfield District

800 Truxtun Avenue, Room 302
Bakersfield, California 93301
805/ 861-4191

Bishop Resource Area

873 North Main Street, Suite 201
Bishop, California 93514
619/ 872-4881

Caliente Resource Area

520 Butte Street
Bakersfield, California 93305
805/ 861-4236

Folsom Resource Area

63 Natoma Street
Folsom, California 95630
916/ 978-4177

Hollister Resource Area

P.O. Box 365, Parkhill
Hollister, California 95023
408/ 637-8183

California Desert District

1695 Spruce Street
Riverside, California 92507
714/ 351-6383

Barstow Resource Area

831 Barstow Road
Barstow, California 92311
619/ 256-3591

El Centro Resource Area

333 So. Waterman Avenue
El Centro, California 92243
619/ 352-5842

Indio Resource Area

1695 Spruce Street
Riverside, California 92507
714/ 351-6663

Needles Resource Area

901 Third Street
Needles, California 92363
619/ 326-3896

Ridgecrest Resource Area

112 East Dolphin Street
Ridgecrest, California 93555
619/ 375-7125



- State Office
- District Boundaries
- ⊙ District Offices

